



Worldwide Market Forecast Compendium 1994-1999



Worldwide Market Forecast Compendium 1994-1999



Worldwide Market Forecast Compendium

1994-1999





Clients make informed decisions more quickly and economically by using INPUT's services. Since 1974, information technology (IT) users and vendors throughout the world have relied on INPUT for data, research, objective analysis and insightful opinions to prepare their plans, market assessments and business directions, particularly in computer software and services.

Contact us today to learn how your company can use INPUT's knowledge and experience to grow and profit in the revolutionary IT world of the 1990s.

SUBSCRIPTION SERVICES

- Information Services Markets
 - Worldwide and country data
 - Vertical industry analysis
- Systems Integration/Professional Services Markets
- Client/Server Software
- Outsourcing Markets
- Information Services Vendor Profiles and Analysis
- Electronic Commerce/Internet
- U.S. Federal Government IT Markets
- IT Customer Services Directions (Europe)

SERVICE FEATURES

- Research-based reports on trends, etc. (More than 100 in-depth reports per year)
- Frequent bulletins on events, issues, etc.
- 5-year market forecasts
- Competitive analysis
- · Access to experienced consultants
- Immediate answers to questions
- On-site presentations

DATABASES

- Software and Services Market Forecasts
- Software and Services Vendors
- U.S. Federal Government
 - Procurement Plans (PAR, APR)
 - Forecasts
 - Awards (FAIT)

CUSTOM PROJECTS

For Vendors—analyze:

- Market strategies and tactics
- Product/service opportunities
- Customer satisfaction levels
- Competitive positioning
- · Acquisition targets

For Buyers—evaluate:

- Specific vendor capabilities
- Outsourcing options
- Systems plans
- Peer position

OTHER SERVICES

Acquisition/partnership searches

INPUT WORLDWIDE

Frankfurt

Sudetenstraße 9 D-35428 Langgöns-Niederkleen Germany Tel. +49 (0) 6447-6055

Fax +49 (0) 6447-7327

London

Cornwall House 55-77 High Street Slough, Berkshire SL1 1DZ, England Tel. +44 (0)1753 530444 Fax +44 (0)1753 577311

New York

400 Frank W. Burr Blvd. Teaneck, NJ 07666 U.S.A. Tel. 1 (201) 801-0050 Fax 1 (201) 801-0441

Paris

24, avenue du Recteur Poincaré 75016 Paris France Tel. +33 (1) 46 47 65 65 Fax +33 (1) 46 47 69 50

San Francisco

Mountain View CA 94043-0848 U.S.A. Tel. 1 (415) 961-3300 Fax 1 (415) 961-3966

1881 Landings Drive

Tokyo

Saida Building, 4-6, Kanda Sakuma-cho Chiyoda-ku, Tokyo 101 Japan Tel. +81 3 3864-0531

Fax +81 3 3864-4114 **Washington, D.C.**

1921 Gallows Road Suite 250 Vienna, VA 22182-3900 U.S.A. Tel. 1 (703) 847-6870 Fax 1 (703) 847-6872 Published by INPUT 1881 Landings Drive Mountain View, CA 94043-0848 United States of America

U.S. Information Services Market Analysis Program

Worldwide Market Forecast Compendium, 1994-1999

Copyright © 1995 by INPUT. All rights reserved. Printed in the United States of America. No part of the publication may be reproduced or distributed in any form, or by any means, or stored in a database or retrieval system, without the prior written permission of the publisher.

The information provided in this report shall be used only by the employees of and within the current corporate structure of INPUT's clients, and will not be disclosed to any other organisation or person including parent, subsidiary, or affiliated organisation without prior written consent of INPUT.

INPUT exercises its best efforts in preparation of the information provided in this report and believes the information contained herein to be accurate. However, INPUT shall have no liability for any loss or expense that may result from incompleteness or inaccuracy of the information provided.



Table of Contents

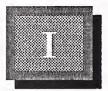
	I	Introduction	I-1
		A. Objective	I-1
		B. Report Size and Scope	I-1
		C. Report Structure	I-2
		1. Forecast Matrices	I-2
		2. Report Chapters	I-3
		D. Definitions	I-3
		E. Methodology	I-4
		F. Forecast Data Base	I-4
	II	Worldwide	II-1
	III	Asia/Pacific	III-1
	īV	Europe	IV-1
•	V	Latin America	V-1
			TT -
	VI	Middle East/Africa	VI-1
-	VII	North America	VII-1

(Blank)

Exhibits

II	_		
	-1	Information Services Market Forecast, Worldwide, 1994-199	9 II-2
III			
	-1	Information Services Market Forecast, Asia/Pacific,	
	_	1994-1999	III-2
	-2	Information Services Market Forecast, Australia, 1994-1999	
	-3	Information Services Market Forecast, Hong Kong, 1994-199	
	-4	Information Services Market Forecast, India, 1994-1999	III-5
	-5	Information Services Market Forecast, Japan, 1994-1999	III-6
	-6	Information Services Market Forecast, New Zealand,	
		1994-1999	III-7
	-7	Information Services Market Forecast, Singapore, 1994-1999	9 III-8
	-8	Information Services Market Forecast, South Korea,	
		1994-1999	III-9
	-9	Information Services Market Forecast, Taiwan, 1994-1999	III-10
	-10	Information Services Market Forecast, Other Asia/Pacific,	
		1994-1999	III-11
IV			
_ ,	-1	Information Services Market Forecast, Europe, 1994-1999	IV-2
	-2	Information Services Market Forecast, Austria, 1994-1999	IV-3
	-3	Information Services Market Forecast, Belgium, 1994-1999	IV-4
	-4	Information Services Market Forecast, Denmark, 1994-1999	
	-5	Information Services Market Forecast, Finland, 1994-1999	IV-6
	-6	Information Services Market Forecast, France, 1994-1999	IV-7
	-7	Information Services Market Forecast, Germany, 1994-1999	IV-8
	-8	Information Services Market Forecast, Greece, 1994-1999	IV-9
	-9	Information Services Market Forecast, Ireland, 1994-1999	IV-10
	-10	Information Services Market Forecast, Italy, 1994-1999	IV-11
	-11	Information Services Market Forecast, Netherlands,	
		1994-1999	IV-12
	-12	Information Services Market Forecast, Norway, 1994-1999	IV-13
	-13	Information Services Market Forecast, Portugal, 1994-1999	IV-14
	-14	Information Services Market Forecast, Spain, 1994-1999	IV-15
	-15	Information Services Market Forecast, Sweden, 1994-1999	IV-16

	-16	Information Services Market Forecast, Switzerland, 1994-1999	IV-17
	-17	Information Services Market Forecast, United Kingdom, 1994-1999	IV-18
	-18	Information Services Market Forecast, Central and Eastern Europe, 1994-1999	IV-19
V			
	-1	Information Services Market Forecast, Latin America, 1994-1999	V-2
	-2	Information Services Market Forecast, Argentina, 1994-1999	V-3
	-3	Information Services Market Forecast, Brazil, 1994-1999	V-4
	-4	Information Services Market Forecast, Venezuela, 1994-1999	
	-5	Information Services Market Forecast, Other Latin America, 1994-1999	
VI			
	-1	Information Services Market Forecast, Middle East/Africa, 1994-1999	VI-2
VII			
	-1	Information Services Market Forecast, North America, 1994-1999	VII-2
	-2	Information Services Market Forecast, Canada, 1994-1999	VII-3
	-3	Information Services Market Forecast, Mexico, 1994-1999	VII-4
	-4	Information Services Market Forecast, United States,	
	·	1994.1999	VII-5



Introduction

Δ

Objective

This new report, the Worldwide Market Forecast Compendium, 1994-1999, is a compilation of all 1994 country and regional forecasts contained in the 1994 edition of INPUT's annual Worldwide Information Services Forecast.

The intent of this compendium is to provide a concise reference document containing all INPUT Worldwide forecasts. For those wishing to refer only to forecast data, it is simply structured, easy to use and can be readily transported. Those wishing a more complete analysis—including (for each country) a national overview, market forecast analysis, market considerations, leading vendors and IT spending—will find that information in the full report, Worldwide Information Services Forecast, 1994-1999.

B

Report Size and Scope

The full annual report is approximately 400 pages in length and, traditionally, contains 250 or more exhibits. This Compendium is 50 pages long and provides the full information services market forecasts for the world, five regions, 30 countries and three country groupings. Each forecast provides five year spending estimates for up to eight product/service categories. The following forecasts are included in this report:

Worldwide Forecast

Regional Forecasts

- Asia/Pacific
- Europe
- · Latin America
- · Middle East/Africa
- · North America

Country Forecasts

- Argentina
- Australia
- Austria
- Belgium
- Brazil
- Canada
- · Denmark
- Finland
- France
- · Germany
- Greece
- · Hong Kong
- India
- Ireland
- Italy

- Japan
- Mexico
- Netherlands
- Norway
- · New Zealand
- Portugal
- Singapore
- · South Korea
- Spain
- Sweden
- Switzerland
- Taiwan
- United Kingdom
- · United States
- Venezuela

Country Groupings

- Central/Eastern Europe
- · Other Asia/Pacific
- · Other Latin America

C

Report Structure

1. Forecast Matrices

This report contains five-year forecasts for eight product/service categories—professional services, systems integration, outsourcing, processing services, network services, systems software, applications software and turnkey systems—for each country and region. Where information is available, sub-categories—e.g. electronic information services and network applications as subsets of network services—have also been included. When sufficient data is not available to make a forecast for any information sub-element, or where the expenditures for a product or service are too small to be effectively measured, that element is not included in the forecast matrix.

Each matrix provides the 1993 actual market size, and 1994 through 1999 forecasts of market size for the measured entity. All forecasts are in millions of dollars (\$M). Growth percentages for 1993 to 1994 are provided, and compound annual growth rates (CAGR) are indicated for the 1994 through 1999 forecasts.

2. Report Chapters

The balance of this report is organized as follows:

- · Chapter II contains the worldwide forecast
- Chapter III contains the Asia/Pacific regional forecast and nine country or country-grouping forecasts
- Chapter IV contains the European regional forecast and 17 country or country-grouping forecasts
- Chapter V contains the Latin American regional forecast and four country or country-grouping forecasts
- · Chapter VI contains the Middle East/Africa regional forecast
- Chapter VII contains the North American regional forecast and three country forecasts

In prior worldwide reports, Mexico was included in the Latin American region, but as a result of the North American Free Trade Agreement (NAFTA), Mexico's economic ties with the United States have been further strengthened, and it is now included in the North American region, where INPUT feels it more logically belongs.

Definitions

The reader of this forecast compendium is referred to INPUT's 1994 *Definition of Terms* for clarification of any product/service category or sub-category. That document offers definitions and explanations of all product/service terms used by INPUT in preparing its market analyses and forecasts. The *Definitions* book is available without charge from your local INPUT office.

E

Methodology

Much of the data on which this compendium is based was gathered during 1994 and early 1995 as part of INPUT's ongoing market analysis program. Market sizes and growth rates are based upon INPUT research and interviews with both local and multi-national vendors serving the indicated geographies.

Rounding - In some instances, sub-totals in a forecast may not add to indicated totals due to rounding at either the sub-total or total levels (or both). Such differences are minor and do not affect the validity of the forecast.

F

Forecast Data Base

This report is also shipped with a 3.5" disk containing all forecast matrices in Excel spreadsheet format. All the spreadsheets, except for the European region, use summation algorithms and percentage and compound growth formulas to calculate such values. If a client wishes to try different expenditure levels for various product/service sub-categories, the product/service total and yearly total will be calculated automatically, and percentages updated accordingly. The result should be saved under a new file name to protect the integrity of the data base for this report.

The data in the European spreadsheets has been "hard-entered." That is, the totals and percentages are all entered directly into the cells and are not the result of calculations. If desired, the total cells can be redefined as calculated values, with only small changes to the printed values, and percentages (if changed to formulas) will remain unchanged.

For ease of reference, the following is a list of file names on the disk:

<u>File Name</u>	Country or Region
4APREG.XLS	Asia/Pacific Region
4ARG.XLS 4AUS.XLS	Argentina Australia
4AUSTRIA.XLS	Austria
4BEL.XLS 4BRA.XLS	Belgium Brazil
4CAN.XLS	Canada
4CEEUR.XLS	Central/Eastern Europe

ADEM VI C	n 1
4DEN.XLS	Denmark
4EURREG.XLS	European Region
4FIN.XLS	Finland
4FRA.XLS	France
4GER.XLS	Germany
4GRE.XLS	Greece
4HKG.XLS	Hong Kong
4IND.XLS	India
4IRE.XLS	Ireland
4ITA.XLS	Italy
4JPN.XLS	Japan
4LAMREG.XLS	Latin American Region
4MEAREG,XLS	Middle East/Africa Region
4MEX.XLS	Mexico
4NAMREG.XLS	North American Region
4NET.XLS	Netherlands
4NOR.XLS	Norway
4NWZ.XLS	New Zealand
40AP.XLS	Other Asia/Pacific
40LA.XLS	Other Latin Amrica
4POR.XLS	Portugal
4SIN.XLS	Singapore
4SKR.XLS	South Korea
4SPA.XLS	Spain
4SWE.XLS	Sweden
4SWI.XLS	Switzerland
4TAI.XLS	Taiwan
4UK.XLS	United Kingdom
4USA.XLS	United States
4VEN.XLS	Venezuela
4WW.XLS	Worldwide

For those wishing to save these files on another medium, there are 39 files occupying 445K bytes of storage.

(Blank)



Worldwide

This chapter presents the information services market forecast for the world for the period 1994-1999. The forecast is a consolidation of the following five regional forecasts:

- · Asia/Pacific
- Europe
- Latin America
- Middle East/Africa
- North America

The individual regional forecasts are presented as the first exhibit in each of the five following chapters. The worldwide forecast is offered at the product/service category level only, since a consolidation can be made only at the lowest level provided for any of the five regional forecasts. For the period 1994-1999, all regional forecasts, except Europe, were made at the product/service category level.

Information Services Market Forecast Worldwide, 1994-1999

PRODUCT/SERVICE CATEGORIES	1993 (\$M)	Growth 93-94 (%)	1994 (\$M)	1995 (\$M)	1996 (\$M)	1997 (\$M)	1998 (\$M)	1999 (\$M)	CAGR 94-99 (%)
WORLDWIDE TOTAL	273953	8%	295754	322528	357610	398435	446670	502573	11%
Professional Services	65241	4%	67984	72167	78226	84990	93168	102408	9%
Systems Integration	19252	10%	21163	23759	27215	31280	35846	41245	14%
Outsourcing	20356	13%	23075	26513	30912	36344	42861	50731	17%
Processing Services	38196	5%	40209	42491	45534	48840	52635	56689	7%
Network Services	21834	13%	24621	27994	33024	38890	46132	54605	17%
Applications Software	40606	12%	45628	51734	59095	67935	78215	90319	15%
Turnkey Systems	29425	6%	31288	33467	36161	39235	42645	46235	8%
Systems Software	39043	7%	41786	44403	47443	50921	55168	60341	8%



Asia/Pacific

This chapter presents the information services market forecast for the Asia/Pacific region. A regional summary at the product/service category level is provided, and separate country (or country grouping) forecasts are included for:

- Australia
- Hong Kong
- India
- Japan
- · New Zealand
- Singapore
- · South Korea
- Taiwan
- · Other Asia/Pacific

Information Services Market Forecast Asia/Pacific, 1994-1999

PRODUCT/SERVICE CATEGORIES	1993 (\$M)	Growth 93-94 (%)	1994 (\$M)	1995 (\$M)	1996 (\$M)	1997 (\$M)	1998 (\$M)	1999 (\$M)	CAGR 94-99 (%)
REGIONAL TOTAL	53818	1%	54239	56739	63689	72001	81865	93617	12%
Professional Services	21390	-2%	21022	21379	23742	26407	29491	33056	9%
Systems Integration	4137	3%	4254	4578	5337	6277	7355	8665	15%
Outsourcing	4298	4%	4468	4892	5681	6838	8252	9968	17%
Processing Services	7796	-3%	7598	7722	8192	8685	9254	9868	5%
Network Services	4479	4%	4665	4840	5826	7029	8506	10314	17%
Applications Software	4375	7%	4699	5252	6014	6917	8014	9330	15%
Turnkey Systems	3668	-1%	3622	3755	4072	4435	4858	5344	8%
Systems Software	3675	6%	3911	4321	4825	5413	6135	7072	13%

Information Services Market Forecast Australia, 1994-1999

		Growth							CAGR
PRODUCT/SERVICE	1993	93-94	1994	1995	1996	1997	1998	1999	94-99
CATEGORIES	(\$M)	(%)	(\$M)	(\$M)	(\$M)	(\$M)	(\$M)	(\$M)	(%)
COUNTRY TOTAL	2847	8%	3084	3361	3700	4068	4540	5000	400/
COUNTRY TOTAL	2047	0 70	3004	3301	3700	4000	4516	5026	10%
Professional Services	578	11%	641	714	801	897	1018	1150	12%
- IS Consulting	136	13%	153	173	197	222	252	285	13%
- Education & Training	67	4%	70	74	78	83	93	105	8%
- Software Development	375	11%	418	467	526	592	673	760	13%
Systems Integration	252	10%	276	302	335	370	406	454	10%
- Equipment	106	8%	114	125	137	150	165	182	10%
- Software Products	26	8%	28	31	34	37	41	45	10%
- Professional Services	109	11%	121	133	150	168	184	209	12%
- Other	11	18%	13	13	14	15	16	18	7%
Outsourcing	120	5%	126	131	139	148	159	173	7%
- Platform Operations	70	6%	74	77	82	87	94	101	6%
- Applications Operations	50	4%	52	54	57	61	65	72	7%
Processing Services	310	6%	329	352	381	410	448	489	8%
- Transaction Processing	260	6%	276	295	320	344	377	411	8%
- Utility Processing	15	7%	16	17	18	19	21	23	8%
- Other Processing	35	6%	37	40	43	47	50	55	8%
Network Services	281	8%	303	332	365	405	448	497	10%
- Electronic Information Svcs	225	6%	239	256	276	299	331	367	9%
- Network Applications	56	14%	64	76	89	106	117	130	15%
Applications Software	565	9%	618	678	750	831	935	1057	11%
Turnkey Systems	289	6%	306	326	354	381	414	449	8%
- Equipment	132	5%	139	147	158	168	182	197	7%
- Software Products	69	4%	72	75	80	85	92	100	7%
- Professional Services	88	8%	95	104	116	128	140	152	10%
Systems Software	452	7%	485	526	575	626	688	757	9%
- Systems Control	197	9%	215	236	262	289	321	353	10%
- Data Center Management	92	5%	97	104	113	121	132	145	8%
- Applications Development	163		173	186	200	216	235	259	8%

Information Services Market Forecast Hong Kong, 1994-1999

		Growth							CAGR
PRODUCT/SERVICE CATEGORIES	1993 (\$M)	93-94 (%)	1994 (\$M)	1995 (\$M)	1996 (\$M)	1997 (\$M)	1998 (\$M)	1999 (\$M)	94-99 (%)
CATEGORIES	(200)	1 101	(φινι)	(ψ/ιτ)	(411)	ξΦ101)	(500)	(211)	170)
COUNTRY TOTAL	632	13%	717	815	933	1070	1233	1417	15%
Professional Services	126	10%	138	152	170	191	214	239	12%
- IS Consulting	32	9%	35	39	44	50	57	65	13%
- Education & Training	12	8%	13	13	14	15	16	17	6%
- Software Development	82	10%	90	100	112	126	141	157	12%
Systems Integration	34	15%	39	43	49	55	63	73	13%
- Equipment	17	6%	18	20	23	26	30	35	14%
- Software Products	3	33%	4	4	5	5	6	7	12%
 Professional Services 	12	17%	14	16	18	20	23	26	13%
- Other	2	50%	3	3	3	4	4	5	11%
Outsourcing	31	13%	35	39	43	49	56	64	13%
- Platform Operations	19	16%	22	25	28	32	37	42	14%
- Applications Operations	12	8%	13	14	15	17	19	22	11%
Processing Services	71	7%	76	80	86	92	100	110	8%
- Transaction Processing	52		55	58	62	66	71	76	7%
- Utility Processing	11	9%	12	13	14	16	18	21	12%
- Other Processing	8	13%	9	9	10	10	11	13	8%
Network Services	44	14%	50	60	70	81	94	110	17%
- Electronic Information Svcs	19	3	21	24	28	32	37	42	15%
- Network Applications	25	16%	29	36	42	49	57	68	19%
Applications Software	138	14%	157	180	207	238	274	317	15%
Turnkey Systems	48	13%	54	60	67	76	88	102	14%
- Equipment	23	13%	26	29	32	36	42	49	14%
- Software Products	11	9%	12	13	14	16	19		13%
- Professional Services	14	14%	16	18	21	24	27	31	14%
Systems Software	140	20%	168	201	241	288	344	1	
- Systems Control	72	22%	88	106	127	152	183	l .	
- Data Center Management	32	13%	36	42	48	54	61	67	1
- Applications Development	36	22%	44	53	66	82	100	120	22%

Information Services Market Forecast India, 1994-1999

PRODUCT/SERVICE CATEGORIES	1993 (\$M)	Growth 93-94 (%)	1994 (\$M)	1995 (\$M)	1996 (\$M)	1997 (\$M)	1998 (\$M)	1999 (\$M)	CAGR 94-99 (%)
COUNTRY TOTAL	418	27%	531	681	878	1130	1459	1883	29%
Professional Services	194	31%	254	332	437	573	757	992	31%
Processing Services	19	5%	20	21	24	27	31	36	12%
Network Services	8	25%	10	13	16	20	25	32	26%
Applications Software	108	30%	140	184	241	316	412	540	31%
Turnkey Systems	21	24%	26	32	39	48	58	70	22%
Systems Software	68	19%	81	99	121	146	176	213	21%

Information Services Market Forecast Japan, 1994-1999

		Growth							CAGR
PRODUCT/SERVICE	1993	93-94	1994	1995	1996	1997	1998	1999	94-99
CATEGORIES	(\$M)	(%)	(\$M)	(\$M)	(\$M)	(\$M)	(\$M)	(\$M)	(%)
COUNTRY TOTAL	45000	20/	44007	45.467	50000	55700	20257	20000	00/
COUNTRY TOTAL	45609	-2%	44687	45467	50202	55760	62057	69228	9%
Professional Services	19714	-3%	19057	19056	20962	23057	25362	27895	8%
- IS Consulting	1219	2%	1248	1190	1295	1400	1524	1667	6%
- Education & Training	800	-1%	790	771	829	886	962	1057	6%
- Software Development	17695	-4%	17019	17095	18838	20771	22876	25171	8%
Systems Integration	3609	0%	3619	3800	4363	5037	5780	6629	13%
- Equipment	1257	2%	1286	1333	1524	1752	2000	2267	12%
- Software Products	362	2%	371	381	429	495	552	619	11%
- Professional Services	1895	-1%	1867	2000	2324	2695	3133	3638	14%
- Other	95	0%	95	86	86	95	95	105	2%
Outsourcing	3791	2%	3867	4172	4800	5761	6915	8295	16%
- Platform Operations	3410	1%	3448	3724	4295	5171	6229	7495	17%
- Applications Operations	381	10%	419	448	505	590	686	800	14%
Processing Services	6857	-4%	6562	6563	6886	7219	7591	7971	4%
- Transaction Processing	5838	-4%	5581	5629	5962	6314	6695	7086	5%
- Utility Processing	343	-6%	324	286	257	229	210	190	-10%
- Other Processing	676	-3%	657	648	667	676	686	695	1%
Network Services	3724	1%	3772	3762	4514	5419	6504	7809	16%
- Electronic Information Svcs	1848	4%	1924	2029	2390	2829	3333	3933	15%
- Network Applications	1876	-1%	1848	1733	2124	2590	3171	3876	16%
Applications Software	2724	1%	2762	2952	3248	3571	3933	4324	9%
Turnkey Systems	2904	-5%	2762	2762	2904	3048	3201	3381	4%
- Equipment	952	-7%	886	848		867	886		1%
- Software Products	1162	-4%	1114	1124		1171	1210		3%
- Professional Services	790	-4%	762	790	895	1010	1105		10%
- Floressional Services	7 90	-478	702	7 30	055	1010	1100	1200	1070
Systems Software	2286	0%	2286	2400	2525	2648	2771	2924	5%
- Systems Control	895	0%	895	971	1048	1143			8%
- Data Center Management	829	0%	829	829	829	819	819		0%
- Applications Development	562	0%	562	600	648	686	733	800	7%

Information Services Market Forecast New Zealand, 1994-1999

		Growth							CAGR
PRODUCT/SERVICE CATEGORIES	1993 (\$M)	93-94 (%)	1994 (\$M)	1995	1996	1997	1998	1999	94-99
CATEGORIES	(AMI)	(70)	(DIAI)	(\$M)	(\$M)	(\$M)	(\$M)	(\$M)	(%)
COUNTRY TOTAL	966	9%	1053	1160	1278	1410	1565	1742	11%
Professional Services	266	11%	294	328	369	414	467	528	12%
- IS Consulting	73	11%	81	90	101	114	130	147	13%
- Education & Training	28	7%	30	34	37	42	47	53	12%
- Software Development	165	11%	183	204	231	258	290	328	12%
Systems Integration	61	13%	69	79	90	102	117	135	14%
- Equipment	22	14%	25	27	29	32	36	42	11%
- Software Products	7	14%	8	10	12	14	16	19	19%
- Professional Services	30	13%	34	40	47	54	62	71	16%
- Other	2	0%	2	2	2	2	3	3	8%
Outsourcing	40	8%	43	46	50	55	61	68	10%
- Platform Operations	22	9%	24	27	30	33	37	41	11%
- Applications Operations	18	6%	19	19	20	22	24	27	7%
Processing Services	133	5%	140	151	158	167	178	191	6%
- Transaction Processing	114	6%	121	128	135	142	151	162	6%
 Utility Processing 	11	0%	11	13	13	14	16	17	9%
- Other Processing	8	0%	8	10	10	11	11	12	8%
Network Services	52	12%	58	66	74	83	93	105	13%
- Electronic Information Svcs	41	12%	46	52	59	66	75	85	13%
- Network Applications	11	9%	12	14	15	17	18	20	11%
Applications Software	130	9%	142	156	173	192	212	235	11%
Turnkey Systems	146	8%	157	169	182	195	212	230	8%
- Equipment	65	8%	70	74	79	85	92	99	7%
- Software Products	40	8%	43	47	51	54	59	65	9%
- Professional Services	41	7%	44	48	52	56	61	66	8%
Systems Software	138	9%	150	165	182	202	225	250	11%
- Systems Control	52	10%	57	63	70	78	87	97	11%
- Data Center Management	32	6%	34	37	40	44	49	54	10%
 Applications Development 	54	9%	59	65	72	80	89	99	11%

Information Services Market Forecast Singapore, 1994-1999

PRODUCT/SERVICE CATEGORIES	1993 (\$M)	Growth 93-94 (%)	1994 (\$M)	1995 (\$M)	1996 (\$M)	1997 (\$M)	1998 (\$M)	1999 (\$M)	CAGR 94-99 (%)
COUNTRY TOTAL	780	15%	898	1031	1191	1382	1609	1908	16%
Professional Services	167	17%	195	222	252	292	350	437	18%
Systems Integration	32	19%	38	45	51	60	72	89	19%
Processing Services	178	12%	200	224	252	281	316	350	12%
Network Services	89	21%	108	133	166	208	250	313	24%
Applications Software	131	15%	150	170	195	227	269	323	17%
Turnkey Systems	73	11%	81	93	109	123	136	150	13%
Systems Software	110	15%	126	144	166	191	216	246	14%

Information Services Market Forecast South Korea, 1994-1999

PRODUCT/SERVICE CATEGORIES	1993 (\$M)	Growth 93-94 (%)	1994 (\$M)	1995 (\$M)	1996 (\$M)	1997 (\$M)	1998 (\$M)	1999 (\$M)	CAGR 94-99 (%)
COUNTRY TOTAL	1636	34%	2187	2957	4021	5431	7353	9961	35%
Professional Services	192	40%	268	375	524	725	1019	1456	40%
- IS Consulting	65	43%	93	136	196	280	378	550	43%
- Education & Training	23	30%	30	39	53	68	86	119	32%
- Software Development	104	39%	145	200	275	377	555	787	40%
Systems Integration	118	51%	178	270	403	600	856	1214	47%
- Equipment	48	50%	72	108	160	237	329	457	45%
- Software Products	14	43%	20	28	41	61	89	114	42%
- Professional Services	54	56%	84	132	200	299	435	640	50%
- Other	2	0%	2	2	2	3	3	3	8%
Outsourcing	260	29%	335	435	572	740	968	1266	30%
Processing Services	130	25%	162	207	264	327	407	516	26%
- Transaction Processing	92	30%	120	163	217	276	350	452	30%
- Utility Processing	19	11%	21	22	24	26	29	32	9%
- Other Processing	19	11%	21	22	23	25	28	32	9%
Network Services	208	33%	277	371	501	669	919	1242	35%
- Electronic Information Svcs	152	32%	201	268	358	476	618	802	32%
- Network Applications	56	36%	76	103	143	193	301	440	42%
Applications Software	338	30%	438	576	765	1010	1320	1720	31%
Turnkey Systems	90	41%	127	189	278	408	574	766	43%
- Equipment	50	40%	70	98	140	197	287	375	40%
- Software Products	9	22%	11	12	15	19	24	31	23%
- Professional Services	31	48%	46	79	123	192	263	360	51%
Systems Software	300	34%	402	534	714	952	1290	1781	35%
- Systems Control	139		187	251	335	446	578	829	35%
- Data Center Management	48		60	ı	i .	114	154	190	26%
- Applications Development	113	1	155			392		762	38%
					L				l

Information Services Market Forecast Taiwan, 1994-1999

		Growth							CAGR
PRODUCT/SERVICE	1993	93-94	1994	1995	1996	1997	1998	1999	94-99
CATEGORIES	(\$M)	(%)	(\$M)	(\$M)	(\$M)	(\$M)	(\$M)	(\$M)	(%)
COUNTRY TOTAL	574	14%	655	756	873	1013	1180	1374	16%
Professional Services	124	15%	142	161	183	208	243	286	15%
- IS Consulting	31	16%	36	42	48	54	61	74	16%
- Education & Training	13	8%	14	15	17	18	20	22	9%
- Software Development	80	15%	92	104	118	136	162	190	16%
Systems Integration	23	13%	26	29	34	40	47	55	16%
- Equipment	12	8%	13	14	16	19	23	27	16%
- Software Products	1	0%	1	2	2	2	3	3	25%
 Professional Services 	1	0%	1	1	1	2	2	2	15%
- Other	9	22%	11	12	15	17	19	23	16%
Outsourcing	56	11%	62	69	77	85	93	102	10%
 Platform Operations 	35	11%	39	43	48	53	58	64	10%
- Applications Operations	21	10%	23	26	29	32	35	38	11%
Processing Services	78	12%	87	100	115	133	150	168	14%
- Transaction Processing	41	17%	48	57	66	77	88	100	16%
- Utility Processing	22	9%	24	26	30	33	36	39	10%
- Other Processing	15	0%	15	17	19	23	26	29	14%
Network Services	54	19%	64	76	89	107	130	156	20%
- Electronic Information Svcs	46	17%	54	64	76	92	109	128	19%
- Network Applications	8	25%	10	12	13	15	21	28	23%
Applications Software	68	18%	80	95	114	137	168	207	21%
Turnkey Systems	78	13%	88	101	114	129	145	163	13%
- Equipment	39	10%	43	46	50	53	57	61	7%
- Software Products	17	12%	19	22	26	31	35	40	16%
- Professional Services	22	18%	26	33	38	45	53	62	19%
Systems Software	93	14%	106	125	147	174	204	237	17%
- Systems Control	55	16%	64	76	90	107	125	142	17%
- Data Center Management	14	0%	14	16	19	22	25	28	15%
- Applications Development	24	17%	28	33	38	45	54	67	19%

Information Services Market Forecast Other Asia/Pacific, 1994-1999

PRODUCT/SERVICE CATEGORIES	1993 (\$M)	Growth 93- 9 4 (%)	1994 (\$M)	1995 (\$M)	1996 (\$M)	1997 (\$M)	1998 (\$M)	1999 (\$M)	CAGR 94:99 (%)
COUNTRY TOTAL	356	20%	427	511	613	737	893	1078	20%
Professional Services	29	14%	33	39	44	50	61	73	17%
Systems Integration	8	13%	9	10	12	13	14	16	12%
Processing Services	20	10%	22	24	26	29	33	37	11%
Network Services	19	21%	23	27	31	37	43	50	17%
Applications Software	173	23%	212	261	321	395	491	607	23%
Turnkey Systems	19	11%	21	23	25	27	30	33	9%
Systems Software	88	22%	107	127	154	186	221	262	20%

(Blank)



Europe

This chapter presents the information services market forecast for the European region. A regional summary at the product/service category level is provided, and separate country (or country grouping) forecasts are included for:

- Austria
- Belgium
- Denmark
- Finland
- France
- Germany
- Greece
- Ireland
- Italy

- Netherlands
- Norway
- Portugal
- Spain
- · Sweden
- Switzerland
- United Kingdom
- Central/Eastern Europe

For this region only, totals in the forecast may be rounded and may not equal the sum of subordinate values.

Exhibit IV-1

Information Services Market Forecast Europe, 1994-1999

The state of the s		Growth					4000	4000	CAGR
PRODUCT/SERVICE CATEGORIES	1993 (\$M)	93-94 (%)	1994 (\$M)	1995 (\$M)	1996 (\$M)	1997 (\$M)	1998 (\$M)	1999 (\$M)	94-99 (%)
CATEGORIES		(10)	1.97117		300001.74444.800000000000000000000000000000000	(Y!!!/		331,777,77	7301
REGIONAL TOTAL	71550	6%	76000	80900	86600	93050	100950	109550	8%
Professional Services	20500	2%	21000	22000	22500	23000	24000	25000	4%
- IS Consulting	3000	8%	3250	3550	3900	4300	4700	5200	10%
- Education & Training	2300	4%	2400	2500	2600	2750	2850	3000	5%
- Software Development	15300	0%	15300	15400	15600	15700	15900	16100	1%
- Application Management	165	27%	210	265	330	415	525	665	26%
Systems Integration	4100	12%	4600	5100	5700	6400	7100	8000	12%
- Equipment	1100	9%	1200	1300	1400	1500	1650	1750	8%
- Application Software	750	19%	890	1110	1390	1740	2170	2680	25%
- System Software	330	9%	360	390	420	460	500	540	8%
- Professional Services	1850	11%	2050	2250	2350	2500	2600	2850	7%
- Other	80	19%	95	110	. 130	150	175	210	17%
Outsourcing	2550	25%	3200	3800	4600	5450	6450	7650	19%
- Platform Operations	750	24%	930	1040	1160	1280	1400	1600	11%
- Application Operations	1500	23%	1850	2250	2750	3350	4000	4750	21%
- Desktop Services	300	33%	400	510	650	830	1040	1300	27%
Processing Services	7300	4%	7600	7700	8000	8300	8700	9000	3%
- Transaction Processing	6300	2%	6400	6500	6700	6900	7100	7300	3%
- Utility Processing	250	0%	250	245	245	245	245	250	0%
- Other Processing	790	1	860	950	1040	1150	1260	1390	10%
Network Services	4900	14%	5600	6400	7400	8500	10000	11600	16%
- Electronic Information Svcs	3100	10%	3400	3800	4100	4500	4900	5200	9%
- Network Applications	1400	18%	1650	2050	2600	3300	4200	5350	27%
- Network Management	410	20%	490	570	650	760	880	1010	16%
Systems Software	11800	3%	12200	12600	13000	13400	13900	14500	4%
- Mainframe	5200	1	5100	1	4600	4300	4000	3600	-7%
- Minicomputer	3700	1	3900	4100	4300	4500	4750	4950	5%
- Workstation/PC	2900	12%	3250	3700	4150	4650	5250	5900	13%
Applications Software	9300	9%	10100	11000	12200	13700	15300	17200	11%
- Mainframe	840	1	780		l i		1 1	610	-5%
- Minicomputer	2750	1	2800	ì	1			4300	9%
- Workstation/PC	5800		6500	1			10700	12200	13%
Turnkey Systems	11100	5%	11700	12300	13200	14300	15500	16600	7%
- Equipment	5600	1	5700	1	l .	1	1 1	6900	
- Application Software	2150	1	2350				1	4050	1
- System Software	640	P	660		1				
- Professional Services	2800	1	3000	1		1			1 .

Exhibit IV-2

Information Services Market Forecast Austria, 1994-1999

		Growth							CAGR
PRODUCT/SERVICE CATEGORIES	1993	93-94	1994	1995	1996	1997	1998	1999 (\$M)	94-99
CATEGORIES	(\$M)	(%)	(\$M)	(\$IM)	(\$M)	(\$M)	(\$M)	(21VI)	(%)
COUNTRY TOTAL	1270	6%	1355	1435	1560	1680	1805	1885	7%
Professional Services	285	4%	300	315	330	340	345	350	3%
- IS Consulting	39	11%	43	47	51	55	59	63	8%
- Education & Training	34	4%	36	37	38	39	39	39	2%
- Software Development	215	4%	220	230	240	240	240	240	2%
- Application Management	1	27%	2	2	2	3	4	5	25%
Systems Integration	36	14%	41	46	52	58	66	73	12%
- Equipment	10	8%	11	12	13	13	14	15	7%
- Application Software	7	29%	9	12	14	18	23	28	25%
- System Software	3	15%	3	4	4	5	5	6	12%
- Professional Services	16	8%	17	19	20	21	22	23	6%
- Other	1	20%	1	1	1	2	2	2	15%
Outsourcing	15	20%	17	21	25	29	36	41	19%
- Platform Operations	4	15%	4	5	5	6	6	7	12%
- Application Operations	8	20%	10	12	14	17	20	23	18%
- Desktop Services	3	29%	4	5	6	7	9	12	25%
Processing Services	154	1%	155	158	160	163	169	163	1%
- Transaction Processing	136	1%	136	138	141	143	147	142	1%
- Utility Processing	6	-3%	6	6	6	5	5	5	-3%
- Other Processing	13	3%	13	14	15	16	17	17	5%
Network Services	65	11%	72	81	92	104	118	134	13%
- Electronic Information Svcs	51	9%	56	61	68	74	82	89	10%
- Network Applications	11	24%	13	16	20	24	30	37	23%
- Network Management	4	15%	4	4.5	5	5.5	6.5	7.5	15%
Systems Software	240	5%	250	265	280	300	315	325	5%
- Mainframe	103	-1%	102	100	100	99	97	91	-2%
- Minicomputer	77	9%	84	91	100	109	118	122	8%
- Workstation/PC	58	11%	65	73	82	92	103	110	11%
Applications Software	160	13%	180	200	230	255	290	315	12%
- Mainframe	14	0%	14	14	14	14	14	13	-1%
- Minicomputer	48	10%	53	58	63	70	77	81	9%
- Workstation/PC	100	17%	115	130	150	170	200	220	14%
Turnkey Systems	305	9%	333	365	397	433	473	492	8%
- Equipment	148	8%	159	172	183	195	209	213	6%
- Application Software	61		70	1	93	106	122	135	14%
- System Software	18		19	21	22	24	25	26	6%
- Professional Services	78	8%	85	92	100	107	116	119	7%
						<u> </u>			

Exhibit IV-3

Information Services Market Forecast Belgium, 1994-1999

		Growth							CAGR
PRODUCT/SERVICE	1993	93-94	1994	1995	1996	1997	1998	1999	94-99
CATEGORIES	(\$M)	(%)	(\$M)	(\$M)	(\$M)	(\$M)	(\$M)	(\$M)	(%)
COUNTRY TOTAL	2380	5%	2490	2655	2820	3015	3265	3460	7%
Professional Services	795	2%	810	835	850	875	905	930	3%
- IS Consulting	126	9%	137	152	165	182	201	219	10%
- Education & Training	66	1%	67	69	69	71	73	74	2%
 Software Development 	605	0%	605	610	610	620	630	630	1%
- Application Management	2	25%	3	4	4	6	7	9	25%
Systems Integration	132	9%	144	159	177	201	226	251	12%
- Equipment	36	8%	39	42	45	49	53	56	7%
- Application Software	24	24%	29	37	47	59	75	93	26%
- System Software	10	5%	11	12	12	13	14	15	6%
- Professional Services	60	4%	62	66	70	75	79	81	6%
- Other	3	11%	3	3	4	4	5	6	17%
Outsourcing	75	18%	88	104	124	150	183	223	20%
- Platform Operations	25	10%	28	31	35	40	46	53	14%
- Application Operations	46	21%	56	67	80	98	122	151	22%
- Desktop Services	4	36%	5	7	9	11	15	19	30%
Processing Services	217	-2%	212	210	209	209	211	206	-1%
- Transaction Processing	193	-3%	187	184	183	181	181	176	-1%
- Utility Processing	6	-4%	6	6	6	6	5	5	-2%
- Other Processing	19	5%	19	20	22	23	24	25	6%
Network Services	133	13%	150	169	191	213	246	271	13%
- Electronic Information Svcs	82	8%	89	97	105	114	126	133	8%
- Network Applications	47	18%	56	67	79	93	112	129	18%
- Network Management	4	15%	4	5	6	7	8.5	9.5	18%
Systems Software	380	4%	395	410	425	445	460	475	4%
- Mainframe	179	-1%	177	176	175	173	172	166	1%
- Minicomputer	122	7%	130	137	145	155	163	170	6%
- Workstation/PC	79	11%	87	96	105	116	127	137	9%
Applications Software	365	11%	405	460	515	575	645		
- Mainframe	29	0%	29	29	29	29	1	l .	ł
- Minicomputer	107	10%	118	130	144	159	1		
- Workstation/PC	230	14%	260	300	340	385	445	495	14%
Turnkey Systems	274	7%	295	314	334	355			
- Equipment	133	4%	139	141	144	147			1
- Application Software	58		65	74	82	92		1	
- System Software	12	1	13	14	14	15	1	1	1
- Professional Services	71	10%	78	86	94	103	112	120	9%

Information Services Market Forecast Denmark, 1994-1999

PRODUCT/SERVICE CATEGORIES	1993 (\$M)	Growth 93-94 (%)	1994 (\$M)	1995 (\$M)	1996 (\$M)	1997 (\$M)	1998 (\$M)	1999 (\$M)	CAGR 94-99 (%)
COUNTRY TOTAL	1810	5%	1900	2005	2120	2240	2340	2445	5%
Professional Services	435	3%	450	480	510	540	565	595	6%
- IS Consulting	77	10%	84	93	103	115	127	139	11%
- Education & Training	39	4%	40	41	43	46	47	49	4%
- Software Development	315	2%	325	340	355	370	385	400	4%
- Application Management	3	25%	4	5	6	8	10	12	27%
Systems Integration	57	8%	61	69	78	86	94	101	11%
- Equipment	15	5%	16	17	19	20	22	22	7%
- Application Software	10	21%	13	15	19	24	28	33	21%
- System Software	4	0%	4	5	6	7	7	8	13%
- Professional Services	26	6%	27	30	32	33	35	36	5%
- Other	1	10%	2	2	2	2	2	2	8%
Outsourcing	27	22%	33	40	49	59	69	81	20%
- Platform Operations	8	10%	8	10	11	13	14	16	14%
- Application Operations	14	28%	17	21	25	30	36	41	19%
- Desktop Services	6	30%	8	10	13	15	19	24	25%
Processing Services	444	-2%	436	430	423	411	401	385	-2%
- Transaction Processing	405	-2%	398	391	383	371	360	345	-3%
- Utility Processing	8	-4%	8	8	8	7	7	7	-4%
- Other Processing	30	3%	30	32	33	33	34	34	2%
Network Services	90	10%	99	114	128	145	159	177	12%
- Electronic Information Svcs	54	7%	58	64	69	74	78	83	8%
- Network Applications	33	18%	39	46	55	65	75	87	18%
- Network Management	3	15%	4	4	5	5.5	6.5	7.5	17%
Systems Software	250	6%	265	270	285	300	310	315	4%
- Mainframe	100	l .	100	99	97	96	93	89	-2%
- Minicomputer	87	7%	93	99	105	111	114	117	5%
- Workstation/PC	63	13%	71	78	87	96	105	114	10%
Applications Software	215	10%	235	260	285	325	355	385	10%
- Mainframe	14	1	13	13	13	12	12	11	-3%
- Minicomputer	66	1	69	75		86	92	96	7%
- Workstation/PC	135	ł	150	170	1	220	245	275	13%
Turnkey Systems	301	6%	320	338	358	376	391	404	5%
- Equipment	145	ł	148	150	1	155	155	153	1%
- Application Software	57	9%	62	68		80	1	1	8%
- System Software	19	1	20	21	22	23	23	24	4%
- Professional Services	81	1	90	99	109	120	128	137	9%

Information Services Market Forecast Finland, 1994-1999

PRODUCT/SERVICE CATEGORIES	1993 (\$M)	Growth 93-94 (%)	1994 (\$M)	1995 (\$M)	1996 (\$M)	1997 (\$M)	1998 (\$M)	1999 (\$M)	CAGR 94-99 (%)
COUNTRY TOTAL	1030	2%	1050	1100	1160	1235	1325	1435	6%
Professional Services	280	1%	280	290	300	320	340	370	6%
- IS Consulting	47	6%	49	53	57	62	69	77	9%
- Education & Training	26	0%	26	27	28	29	30	32	4%
- Software Development	205	0%	205	210	215	225	240	255	5%
- Application Management	1	20%	1	1	1	2	2	3	20%
Systems Integration	49	7%	52	58	66	75	87	104	15%
- Equipment	13	7%	14	15	17	18	20	24	11%
- Application Software	9	20%	10	13	16	21	26	34	27%
- System Software	4	9%	4	5	5	6	7	8	13%
- Professional Services	22	4%	23	24	26	29	32	37	10%
- Other	1	17%	1	1	2	2	2	2	15%
Outsourcing	37	19%	43	50	58	67	77	93	16%
- Platform Operations	13	13%	15	17	18	20	23	26	12%
- Application Operations	21	21%	25	30	35	41	48	57	18%
- Desktop Services	3	27%	3	4	5	6	7	9	23%
Processing Services	171	-4%	164	161	159	159	159	156	-1%
- Transaction Processing	153	-4%	147	144	142	140	140	137	-1%
- Utility Processing	5	-11%	5	4	4	4	4	3	-6%
- Other Processing	13	1%	14	14	14	15	16	16	4%
Network Services	47	11%	52	59	68	75	85	97	13%
- Electronic Information Svcs	27	6%	29	31	34	37	39	43	8%
- Network Applications	16	17%	18	22	26	30	37	43	19%
- Network Management	5	16%	5	6	7	8	9.5	11	17%
Systems Software	145	-6%	135	135	135	135	140	140	1%
- Mainframe	59	-15%	50	44	40	37	34	31	-9%
- Minicomputer	48	-2%	47	48	49	51	53	56	\ \
- Workstation/PC	39	0%	39	42	44	48	51	56	7%
Applications Software	140	7%	150	165	185	205	225	255	11%
- Mainframe	12	1	11	10	10	9	9	8	
- Minicomputer	42	1	44	49	53	58	63	1	
- Workstation/PC	85	1	95	105	120	140	155	175	13%
Turnkey Systems	164	5%	173	182	192	202	213	223	5%
- Equipment	79	1	80	81		85	86	87	2%
- Application Software	32	1	35	38	42	45	49	54	9%
- System Software	10	1	11	11	1	12	13	14	
- Professional Services	44	1	48	51	56	60	64	69	8%

Information Services Market Forecast France, 1994-1999

PRODUCT/SERVICE CATEGORIES	1993 (\$M)	Growth 93-94 (%)	1994 (M\$)	1995 (M\$)	1996 (M\$)	1997 (M\$)	1998 (M\$)	1999 (M\$)	CAGR 94-99 (%)
COUNTRY TOTAL	17600	4%	18300	18800	19700	20700	22200	23900	5%
Professional Services	6500	2%	6600	6700	6700	6800	6900	7000	1%
- IS Consulting	740	10%	810	860	910	960	1030	1090	6%
- Education & Training	570	8%	610	630	660	680	710	750	4%
- Software Development	5100	-1%	5100	5100	5100	5000	5000	5000	0%
- Application Management	34	30%	44	54	68	85	107	134	25%
Systems Integration	860	8%	930	1020	1100	1190	1290	1540	11%
- Equipment	240	4%	250	260	280	310	330	350	7%
- Application Software	161	5%	169	212	263	322	398	483	23%
- System Software	68	13%	76	81	88	95	103	110	8%
- Professional Services	380	11%	420	440	440	430	420	560	6%
- Other	17	20%	20	24	28	33	39	46	18%
Outsourcing	640	18%	760	860	1000	1160	1370	1670	17%
- Platform Operations	240	13%	270	270	290	320	350	430	10%
- Application Operations	360	21%	440	520	620	730	880	1050	19%
- Desktop Services	42	30%	55	70	90	114	147	190	28%
Processing Services	1500	1%	1510	1490	1510	1540	1610	1680	2%
- Transaction Processing	1310	-1%	1300	1270	1270	1290	1340	1390	1%
- Utility Processing	60	0%	60	60	60	60	60	60	0%
- Other Processing	130	10%	150	160	180	190	210	230	9%
Network Services	1300	9%	1420	1580	1780	2050	2420	2880	15%
- Electronic Information Svcs	740	8%	800	860	920	990	1080	1190	8%
- Network Applications	440	7%	480	560	670	840	1080	1410	24%
- Network Management	120	20%	140	160	190	220	250	290	15%
Systems Software	2600	2%	2700	2700	2700	2800	2900	3000	2%
- Mainframe	1110	-4%	1070	1020		890	820	740	-7%
- Minicomputer	860	4%	900	920	940	970	1030	1090	4%
- Workstation/PC	650	9%	710	780	850	930	1040	1170	10%
Applications Software	2500	3%	2500	2600	2800	3000	3300	3600	7%
- Mainframe	170	-14%	150	130	110	100		80	-11%
- Minicomputer	730	1%	740	750	790	850	900	930	5%
- Workstation/PC	1600	5%	1600	1700	1900	2100	2300	2600	9%
Turnkey Systems	1800	4%	1870	1940	2040	2190	2380	2590	7%
- Equipment	900	2%	920	930	960	990	1030	1080	3%
- Application Software	420	6%	440	470	510	570	1	710	1
- System Software	31	6%	32	34	1	37	39	41	5%
- Professional Services	450	6%	470	510	540	600	680	750	10%

Information Services Market Forecast Germany, 1994-1999

PRODUCT/SERVICE	1993	Growth 93-94	1994	1995	1996	1997	1998	1999	CAGR 94-99
CATEGORIES	(\$M)	(%)	(\$M)	(\$M)	(\$M)	(\$M)	(\$M)	(\$M)	(%)
COUNTRY TOTAL	14700	6%	15600	16700	18200	19700	21400	23300	8%
Professional Services	2900	2%	3000	3100	3200	3300	3300	3300	2%
- IS Consulting	480	12%	530	600	680	760	840	910	11%
- Education & Training	610	4%	630	660	690	720	750	750	3%
- Software Development	1800	-2%	1800	1800	1800	1800	1700	1600	-2%
- Application Management	14	32%	19	25	33	43	55	71	30%
Systems Integration	600	10%	660	750	830	950	1030	1150	12%
- Equipment	170	7%	180	190	200	210	230	250	7%
- Application Software	115	25%	144	178	224	282	351	443	25%
- System Software	52	6%	55	60	66	72	78	83	9%
- Professional Services	260	4%	270	300	320	360	350	340	5%
- Other	11	25%	14	17	20	23	26	34	19%
Outsourcing	220	26%	280	340	410	490	570	680	20%
- Platform Operations	50	25%	60	60	70	80	80	90	10%
- Application Operations	130	25%	160	200	240	290	340	410	21%
- Desktop Services	46	31%	60	78	98	121	147	181	25%
Processing Services	1380	10%	1520	1610	1750	1900	2010	2130	7%
- Transaction Processing	1150	8%	1240	1320	1440	1520	1610	1670	6%
- Utility Processing	70	0%	70	70	70	70	70	70	0%
- Other Processing	180	13%	200	230	260	290	330	370	13%
Network Services	890	16%	1020	1200	1430	1680	1990	2390	19%
- Electronic Information Svcs	630	10%	690	760	850	910	970	1020	8%
- Network Applications	170	34%	230	310	440	610	840	1150	38%
- Network Management	90	19%	110	120	140	170	190	220	15%
Systems Software	2900	4%	3000	3200	3300	3300	3400	3600	3%
- Mainframe	1380	0%	1380	1320	1240	1090	950	780	-11%
- Minicomputer	860	3%	890	950	1010	1060	1120	1180	6%
- Workstation/PC	690	13%	780	890	1030	1180	1380	1610	16%
Applications Software	2000	9%	2100	2400	2800	3200	3700	4400	15%
- Mainframe	240	1	220	1		200	200	190	-3%
- Minicomputer	600	1	600	I .	ŀ	1010	1180	1410	1
- Workstation/PC	1100	1	1300		1700	2000	2400	2800	16%
Turnkey Systems	3740	5%	3910	4140	4480	4830	5230	5630	8%
- Equipment	1900		1900	1	2010	2070	2130	2180	3%
- Application Software	660	1	750	1	1	1060	1240	1410	14%
- System Software	259	1	264	1	1	305	316	328	1
- Professional Services	920	F	1010	1090	1240	1380	1550	1720	11%

Information Services Market Forecast Greece, 1994-1999

Professional Services 73 8% 79 86 93 103 113 124 10% - IS Consulting 8 13% 9 10 11 133 14 16 12% - Education & Training 7 5% 7 8 8 8 8 9 9 6% - Software Development 58 8% 63 68 74 82 90 99 10% - Application Management 0 0 0% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	PRODUCT/SERVICE CATEGORIES	1993 (\$M)	Growth 93-94 (%)	1994 (\$M)	1995 (\$M)	1996 (\$M)	1997 (\$M)	1998 (\$M)	1999 (\$M)	CAGR 94-99 (%)
- IS Consulting	COUNTRY TOTAL	257	9%	281	309	345	385	433	481	11%
- Education & Training	Professional Services	73	8%	79	86	93	103	113	124	10%
- Software Development	- IS Consulting	8	13%	9	10	11	13	14	16	12%
- Application Management	- Education & Training	7	5%	7	8	8	8	9	9	6%
Systems Integration	- Software Development	58	8%	63	68	74	82	90	99	10%
- Equipment	- Application Management	0	0%	0	0	o	o	0	0	0%
- Application Software	Systems Integration	6	10%	7	8	9	10	12	14	15%
- Application Software	- Equipment	2	11%	2	2	2	3	3	3	12%
- Professional Services	- Application Software	1	24%	1		2	3	3	4	24%
Other	- System Software	0	8%	1	1	1	1	1	1	10%
Outsourcing 3 14% 3 4 4 5 5 6 14% - Platform Operations 2 13% 2 2 2 3 3 3 13% - Application Operations 1 12% 1 1 2 2 2 2 13% - Desktop Services 0 17% 0 0 0 1 1 1 22% - Desktop Services 38 9% 41 44 48 52 57 62 9% - Transaction Processing 33 9% 36 39 42 46 50 55 9% - Utility Processing 2 5% 2 <	- Professional Services	3	10%	3	3	4	4	5	5	11%
- Platform Operations	- Other	0	14%	0	0	0	0	o	o	20%
- Application Operations	Outsourcing	3	14%	3	4	4	5	5	6	14%
- Application Operations	- Platform Operations	2	13%	2	2	2	3	3	3	13%
Processing Services 38 9% 41 44 48 52 57 62 9% - Transaction Processing 33 9% 36 39 42 46 50 55 9% - Utility Processing 2 5% 2 2 2 2 2 2 2 2 5% 9% - Other Processing 3 8% 3 3 4 4 4 5 8% - Other Processing 3 8% 3 3 4 4 4 5 8% - Other Processing 3 8% 3 3 4 4 4 5 8% - Other Processing 3 8% 3 3 4 4 4 5 8% Network Services 13 17% 15 15 12 11 12 14 15 17 12 14 15 17 12% 11	- Application Operations	1	12%		1		2	2	2	13%
- Transaction Processing 33 9% 36 39 42 46 50 55 9% Other Processing 2 5% 2 2 2 2 2 2 2 2 5% Other Processing 3 8% 3 3 4 4 4 4 5 8% Network Services 13 17% 15 17 21 25 29 34 18% - Electronic Information Svcs 8 12% 9 11 12 14 15 17 12% - Network Applications 4 25% 5 6 8 10 12 15 26% - Network Management 1 27% 1 0.8 1.1 1.4 1.7 2.1 26% Systems Software 45 5% 47 50 55 59 65 72 9% - Mainframe 19 -5% 18 17 17 16 16 15 -3% - Minicomputer 15 12% 16 19 21 24 28 32 14% - Workstation/PC 11 13% 12 14 16 19 22 25 15% Applications Software 2 8 16% 32 38 44 51 60 71 17% - Mainframe 2 -3% 2 2 2 2 2 2 2 3 3% - Minicomputer 7 14% 8 10 11 13 15 17 15% - Workstation/PC 18 20% 22 26 30 36 43 52 19% Turnkey Systems 51 9% 56 62 70 79 90 101 12% - Equipment 25 6% 26 28 30 33 36 39 9% - Application Software 10 14% 12 13 16 18 22 25 17% - System Software 10 14% 12 13 16 18 18 22 25 17% - System Software 10 14% 14% 15 16 18 18 18 18 18 18 18 18 18 18 18 18 18	- Desktop Services	0	17%	0	0	0	1	1	1	22%
- Utility Processing	Processing Services	38	9%	41	44	48	52	57	62	9%
- Other Processing 3 8% 3 3 4 4 4 4 5 8% Network Services 13 17% 15 17 21 25 29 34 18% - Electronic Information Svcs 8 12% 9 11 12 14 15 17 12% - Network Applications 4 25% 5 6 8 10 12 15 26% - Network Management 1 27% 1 0.8 1.1 1.4 1.7 2.1 26% Systems Software 45 5% 47 50 55 59 65 72 9% - Mainframe 19 -5% 18 17 17 16 16 16 15 -3% - Minicomputer 15 12% 16 19 21 24 28 32 14% - Workstation/PC 11 13% 12 14 16 19 22 25 15% Applications Software 2 16% 32 38 44 51 60 71 17% - Mainframe 2 -3% 2 2 2 2 2 2 2 2 3 3 3 4 4 51 - Workstation/PC 18 20% 22 26 30 36 43 52 19% Turnkey Systems 51 9% 56 62 70 79 90 101 12% - Equipment 25 6% 26 28 30 33 36 39 9% - Application Software 10 14% 12 13 16 18 22 25 17% - System Software 10 14% 12 13 16 18 22 25 17% - System Software 3 6% 3 3 3 4 4 4 4 9 9%	- Transaction Processing	33	9%	36	39	42	46	50	55	9%
Other Processing 3 8% 3 3 4 4 4 4 5 8% Network Services 13 17% 15 17 21 25 29 34 18% - Electronic Information Svcs 8 12% 9 11 12 14 15 17 12% - Network Applications 4 25% 5 6 8 10 12 15 26% - Network Management 1 27% 1 0.8 1.1 1.4 1.7 2.1 26% Systems Software 45 5% 47 50 55 59 65 72 9% - Mainframe 19 -5% 18 17 17 16 16 16 15 -3% - Minicomputer 15 12% 16 19 21 24 28 32 14% - Workstation/PC 11 13% 12 14 16 19 22 25 15% Applications Software 2 3 16% 32 38 44 51 60 71 17% - Mainframe 2 -3% 2 2 2 2 2 2 2 2 2 2 3 3 3 4 5 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	- Utility Processing	2	5%	2	2	2	2	2	2	5%
- Electronic Information Svcs	- Other Processing	3	8%			4	4	4	5	8%
- Network Applications	Network Services	13	17%	15	17	21	25	29	34	18%
- Network Management	- Electronic Information Svcs	8	12%	9	11	12	14	15	17	12%
Systems Software 45 5% 47 50 55 59 65 72 9% - Mainframe 19 -5% 18 17 17 16 16 15 -3% - Minicomputer 15 12% 16 19 21 24 28 32 14% - Workstation/PC 11 13% 12 14 16 19 22 25 15% Applications Software 28 16% 32 38 44 51 60 71 17% - Mainframe 2 -3% 2 3 <td>- Network Applications</td> <td>4</td> <td>25%</td> <td>5</td> <td>6</td> <td>8</td> <td>10</td> <td>12</td> <td>15</td> <td>26%</td>	- Network Applications	4	25%	5	6	8	10	12	15	26%
- Mainframe	- Network Management	1	27%	1	0.8	1.1	1.4	1.7	2.1	26%
- Minicomputer	Systems Software	45	5%	47	50	55	59	65	72	9%
- Workstation/PC	- Mainframe	19	-5%	18	17	17	16	16	15	-3%
Applications Software 28 16% 32 38 44 51 60 71 17% - Mainframe 2 -3% 2 2 2 2 2 2 2 2 3% 3% 3% 44 51 60 71 17% 17% 17% 17% 17% 18% 2 3 3 3 4 3 5 1 15% 17 15% 15% 15% 15% 10% 1 10% 1 <t< td=""><td>- Minicomputer</td><td>15</td><td>12%</td><td>16</td><td>19</td><td>21</td><td>24</td><td>28</td><td>32</td><td>14%</td></t<>	- Minicomputer	15	12%	16	19	21	24	28	32	14%
- Mainframe 2 -3% 2 2 2 2 2 2 3 -3% - Minicomputer 7 14% 8 10 11 13 15 17 15% - Workstation/PC 18 20% 22 26 30 36 43 52 19% - Workstation/PC 51 9% 56 62 70 79 90 101 12% - Equipment 25 6% 26 28 30 33 36 39 9% - Application Software 10 14% 12 13 16 18 22 25 17% - System Software 3 6% 3 3 3 3 4 4 4 9%	- Workstation/PC	11	13%	12	14	16	19	22	25	15%
- Mainframe 2 -3% 2 2 2 2 2 2 3 -3% - Minicomputer 7 14% 8 10 11 13 15 17 15% - Workstation/PC 18 20% 22 26 30 36 43 52 19% - Workstation/PC 51 9% 56 62 70 79 90 101 12% - Equipment 25 6% 26 28 30 33 36 39 9% - Application Software 10 14% 12 13 16 18 22 25 17% - System Software 3 6% 3 3 3 3 4 4 4 9%	Applications Software	28	16%	32	38	44	51	60	71	17%
- Minicomputer 7 14% 8 10 11 13 15 17 15% 20 26 30 36 43 52 19% Turnkey Systems 51 9% 56 62 70 79 90 101 12% 25 6% 26 28 30 33 36 39 9% 26 Application Software 10 14% 12 13 16 18 22 25 17% 29 20 20 20 20 20 20 20 20 20 20 20 20 20			1				2		2	-3%
- Workstation/PC 18 20% 22 26 30 36 43 52 19% Turnkey Systems 51 9% 56 62 70 79 90 101 12% - Equipment 25 6% 26 28 30 33 36 39 9% - Application Software 10 14% 12 13 16 18 22 25 17% - System Software 3 6% 3 3 3 4 4 9 9%								15		
- Equipment 25 6% 26 28 30 33 36 39 9% - Application Software 10 14% 12 13 16 18 22 25 17% - System Software 3 6% 3 3 3 4 4 4 9%	•	18		22	26	30	36	43	52	19%
- Equipment 25 6% 26 28 30 33 36 39 9% - Application Software 10 14% 12 13 16 18 22 25 17% - System Software 3 6% 3 3 3 4 4 4 9%	Turnkey Systems	51	9%	56	62	70	79	90	101	12%
- Application Software 10 14% 12 13 16 18 22 25 17% - System Software 3 6% 3 3 3 4 4 4 9%			1	26				36	39	9%
- System Software 3 6% 3 3 3 4 4 4 9%		3	14%	1	13	1		22	25	17%
		3	6%	1			4		4	9%
		14	13%	16	18	21	25	29	33	16%

Information Services Market Forecast Ireland, 1994-1999

PRODUCT/SERVICE	1993	Growth 93-94	1994	1995	1996	1997	1998	1999	CAGR 94-99
CATEGORIES	(\$M)	(%)	(\$M)	(\$M)	(\$M)	(\$M)	(\$M)	(\$M)	(%)
COUNTRY TOTAL	493	4%	514	542	585	627	676	732	7%
Professional Services	130	2%	132	139	145	158	172	186	7%
- IS Consulting	16	0%	16	16	17	18	20	21	6%
- Education & Training	13	0%	13	13	13	13	14	15	3%
- Software Development	101	3%	104	110	115	125	138	149	7%
- Application Management	0	0%	0	o	0	o	0	0	0%
Systems Integration	9	8%	10	11	12	13	14	16	9%
- Equipment	3	5%	3	3	3	3	4	4	7%
- Application Software	1	20%	2	2	3	3	4	5	23%
- System Software	1	11%	1	1	1	1	1	1	8%
- Professional Services	4	7%	5	5	5	5	6	6	6%
- Other	0	0%	0	0	0	0	0	0	0%
Outsourcing	10	29%	13	16	20	25	32	41	26%
- Platform Operations	6	25%	7	9	11	13	17	21	25%
- Application Operations	3	50%	4	6	7	9	12	15	28%
- Desktop Services	1	0%	1	2	2	3	4	5	30%
Processing Services	55	-3%	54	54	52	54	54	54	0%
- Transaction Processing	41	-3%	39	38	37	37	35	35	-2%
- Utility Processing	1	0%	1	1	1	1	1	1	0%
- Other Processing	12	6%	13	13	14	16	16	17	6%
Network Services	17	8%	18	21	25	28	32	38	16%
- Electronic Information Svcs	9	15%	11	12	13	16	17	20	13%
- Network Applications	6	13%	6	8	9	11	13	16	20%
- Network Management	1	0%	1	1.8	2.1	2.4	2.7	3.1	17%
Systems Software	83	-1%	82	83	85	87	88	89	2%
- Mainframe	38	1	35			30	28	25	-6%
- Minicomputer	25	1	26			30	1	i .	4%
- Workstation/PC	20	i	21	23	E .	9	•	33	9%
Applications Software	69	8%	75	80	87	96	101	111	8%
- Mainframe	7	1	7	1	1		1		
- Minicomputer	17	1	18	1	1	1	1		
- Workstation/PC	45	1	49	1	1	1	1		11%
Turnkey Systems	120	6%	127	141	155	169	183	197	9%
- Equipment	61	1	65	i .	1	1	l .	1	
- Application Software	23	1	26	1	1	1	1	i	l.
- System Software	4		4				1 .		
- Professional Services	29	1	33		1		54	61	13%
10.000.0.101									

Information Services Market Forecast Italy, 1994-1999

COUNTRY TOTAL	6700			(\$M)	(\$M)	(\$M)	1998 (\$M)	1999 (\$M)	94+99 (%)
		4%	7000	7300	7800	8400	9100	9800	7%
Professional Services	2000	-1%	2000	2000	2100	2100	2200	2400	3%
IS Consulting	290	10%	320	340	360	410	460	530	10%
Education & Training	150	6%	150	150	160	170	180	200	5%
Custom Software	1600	-4%	1500	1500	1500	1500	1600	1600	1%
Application Management	15	24%	18	21	25	32	40	51	23%
Systems Integration	290	9%	310	340	380	420	470	510	10%
Equipment	80	0%	80	90	90	100	110	120	7%
Application Software	56	0%	56	67	82	99	123	152	22%
System Software	23	0%	23	26	29	32	35	38	10%
Professional Services	120	22%	150	150	170	180	190	200	6%
Other	6	0%	6	6	8	9	10	12	15%
Dutsourcing	200	23%	250	300	350	430	520	630	20%
Platform Operations	60	15%	70	70	70	80	90	120	12%
Applications Operations	120	25%	150	180	220	260	320	380	21%
Desktop Services	29	30%	38	50	64	82	105	132	28%
Processing Services	690	-2%	680	680	690	710	720	740	2%
Transaction Processing	620	-2%	610	600	610	620	630	640	1%
Utility Processing	10	0%	10	10	10	10	10	10	0%
Other Processing	60	5%	70	70	70	80	80	90	6%
Network Services	380	14%	430	500	570	670	770	890	16%
Electronic Information Svcs	230	5%	250	260	270	280	280	280	3%
Network Applications	120	30%	150	200	260	330	430	540	29%
Network Management	30	20%	40	40	50	60	60	70	16%
Systems Software	1300	4%	1400	1500	1500	1600	1600	1700	4%
Mainframe	530	-4%	510	470	450	430	410	370	-6%
Minicomputer	440	5%	460	490	510	520	530	540	3%
Workstation/PC	370	16%	430	500	560	630	700	780	13%
Applications Software	1100	10%	1200	1400	1500	1700	1900	2100	11%
Mainframe	90	-6%	90	80	70	70	70	60	-6%
· Minicomputer	310		290	290	300	300	250	200	-7%
Workstation/PC	700	1	900	1000	1100	1300	1500	1800	16%
Turnkey Systems	610	3%	630	670	710	770	820	880	7%
· Equipment	310		320	330	340	360	370	380	4%
- Application Software	150		150	160	180	200	220	240	10%
- System Software	7	8%	8	8	9	9	10	11	7%
- Professional Services	150		160	170	190	210	230	250	10%

Information Services Market Forecast Netherlands, 1994-1999

		Growth							CAGR
PRODUCT/SERVICE	1993	93-94	1994	1995	1996	1997	1998	1999	94-99
CATEGORIES	(\$M)	(%)	(\$M)	(\$M)	(\$M)	(\$M)	(\$M)	(\$M)	(%)
COUNTRY TOTAL	4280	5%	4485	4740	5050	5410	5875	6445	8%
Professional Services	1495	5%	1570	1665	1765	1860	2025	2290	8%
- IS Consulting	199	9%	217	237	261	284	320	371	11%
- Education & Training	176	6%	186	199	212	224	245	279	8%
- Software Development	1105	4%	1150	1200	1255	1310	1405	1565	6%
- Application Management	18	26%	23	28	36	44	54	70	25%
Systems Integration	191	7%	204	222	243	268	304	338	11%
- Equipment	47	6%	49	52	54	60	65	70	7%
- Application Software	35	18%	41	52	64	80	101	124	25%
- System Software	15	0%	15	15	15	15	15	15	0%
- Professional Services	90	3%	93	98	103	108	116	121	5%
- Other	4	14%	4	5	5	6	7	9	16%
Outsourcing	124	21%	150	181	214	258	315	382	21%
- Platform Operations	36	14%	41	47	52	60	70	80	14%
- Application Operations	60	22%	72	88	103	124	150	181	20%
- Desktop Services	28	31%	37	46	59	75	95	121	27%
Processing Services	500	6%	531	557	588	619	655	691	5%
- Transaction Processing	444	6%	469	490	516	541	572	603	5%
- Utility Processing	14	0%	14	14	15	15	15	15	1%
- Other Processing	45	8%	49	52	57	62	67	72	8%
Network Services	227	14%	258	302	353	415	493	578	18%
- Electronic Information Svcs	129	8%	139	152	168	186	204	222	10%
- Network Applications	85	21%	103	132	1	1	261	322	26%
- Network Management	13	20%	16	18	į.	ł	28.5	33.5	17%
Sustana Saftuara	625	-1%	620	625	635	650	655	660	1%
Systems Software - Mainframe	302	1	281	268	í		ŧ .	212	ł .
- Minicomputer	176	l	178	183			199	201	1
- Workstation/PC	145	1	157	173		212	1	248	
Annliastiana Coffus	600	5%	630	660	690	725	765	805	5%
Applications Software	52	1	49	49	l .	44	44	41	i
- Mainframe	176	1	191	206	1	1		286	
- Minicomputer	370	1	385	1	1			475	B
- Workstation/PC	370	3%	363	400	720	1 440			
Turnkey Systems	516	3%	531	547	1	1	1	727	ŀ
- Equipment	245	-1%	243	l				1	1
- Application Software	114	9%	124	1	1	1			
- System Software	33	1	33	1	1	1	1		1
- Professional Services	127	6%	134	142	152	168	186	209	9%
					<u> </u>				L_,

Information Services Market Forecast Norway, 1994-1999

		Growth							CAGR
PRODUCT/SERVICE CATEGORIES	1993 (\$M)	93-94 (%)	1994 (\$M)	1995 (\$M)	1996 (\$M)	1997 (\$M)	1998 (\$M)	1999 (\$M)	94-99 (%)
COUNTRY TOTAL	1515	4%	1570	1620	1700	1795	1890	1995	5%
Professional Services	385	0%	385	390	400	410	420	430	2%
- IS Consulting	57	5%	59	65	70	76	82	88	8%
- Education & Training	47	1%	47	50	53	56	59	61	5%
- Software Development	280	-2%	275	275	275	275	275	275	0%
- Application Management	3	25%	3	4	5	6	7	9	21%
Systems Integration	37	11%	41	47	53	59	67	73	12%
- Equipment	10	7%	11	12	14	14	16	16	8%
- Application Software	7	10%	7	9	12	15	18	22	25%
- System Software	3	25%	3	3	3	3	3	3	0%
- Professional Services	18	12%	20	22	24	26	29	31	10%
- Other	1	0%	1	1	1	1	1	1	15%
Outsourcing	30	18%	35	41	49	58	69	83	19%
- Platform Operations	11	13%	12	14	15	17	19	22	12%
- Application Operations	14	20%	16	20	24	28	33	40	20%
- Desktop Services	5	25%	7	9	11	13	17	21	26%
Processing Services	443	0%	444	440	442	442	443	443	0%
- Transaction Processing	406	0%	406	402	402	402	402	402	0%
- Utility Processing	9	-3%	8	8	8	8	7	7	-3%
- Other Processing	30	2%	30	31	32	33	34	35	3%
Network Services	57	7%	61	67	75	85	95	108	12%
- Electronic Information Svcs	36		37	38		45	47	51	7%
- Network Applications	18	1	21	24		35	41	49	19%
- Network Management	4	16%	4	4.5	5	6	7	8.5	17%
Systems Software	185	2%	190	195	205	215	225	240	5%
- Mainframe	81		78	77	76	75	75	74	-1%
- Minicomputer	59	1	62	65	1	75	80	85	7%
- Workstation/PC	43		47	53		66	73	82	12%
Applications Software	175	10%	195	215	240	270	305	340	12%
Applications Software	1/5		193	l .		14	14	14	-1%
- Mainframe	51		55		l .	69	74	80	8%
- Minicomputer - Workstation/PC	110	ŧ	125		I .		215	l .	ŀ
- VVOIKSIAIION/PC	110	13%	125						
Turnkey Systems	210	II.	218		ł	248	2	274	
- Equipment	107	1	109			117	1	124	
- Application Software	40		43)		57	63		10%
- System Software	13		13	1	1	15		1	
- Professional Services	51	4%	53	54	56	59	63	65	4%

Information Services Market Forecast Portugal, 1994-1999

		Growth							CAGR
PRODUCT/SERVICE	1993	93-94	1994	1995	1996	1997	1998	1999	94-99
CATEGORIES	(\$M)	(%)	(\$M)	(\$M)	(\$M)	(\$M)	(\$M)	(\$M)	(%)
COUNTRY TOTAL	157	14%	178	205	236	275	311	350	14%
Professional Services	41	12%	46	52	58	66	71	79	11%
- IS Consulting	6	18%	7	8	9	11	12	14	16%
- Education & Training	5	13%	5	6	6	7	8	8	10%
- Software Development	29	12%	32	36	39	44	47	51	9%
- Application Management	2	15%	3	3	4	4	5	5	15%
Systems Integration	10	16%	11	13	15	17	20	23	15%
- Equipment	3	20%	3	4	4	5	5	6	12%
- Application Software	2	6%	2	2	3	4	5	7	31%
- System Software	1	21%	1	1	1	1	2	2	12%
- Professional Services	4	17%	5	5	6	7	7	8	9%
- Other	0	0%	0	0	. 0	0	0	0	19%
Outsourcing	6	21%	8	9	11	13	16	19	20%
- Platform Operations	2	16%	2	3	3	4	4	5	15%
- Application Operations	3	21%	2	4	5	6	7	9	20%
- Desktop Services	1	28%	2	2	3	4	5	6	25%
Processing Services	18	11%	20	23	25	28	31	33	11%
- Transaction Processing	16	11%	18	20	22	24	26	28	10%
- Utility Processing	1	8%	1	1	1	1	1	1	5%
- Other Processing	2	18%	2	2	3	3	3	4	15%
Network Services	8	25%	10	13	16	21	26	31	25%
- Electronic Information Svcs	5	22%	6	8	10	13	15	17	22%
- Network Applications	2	34%	3	4	5	7	9	12	i e
- Network Management	1	16%	1	1	1.1	1.3	1.5	1.6	
Systems Software	27	9%	30	33	38	43	47	52	12%
- Mainframe	12	1	12	1		13	13	13	1
- Minicomputer	9	12%	11	1	1	16			1
- Workstation/PC	6	19%	7	9	1	13	1		E .
Applications Software	16	16%	18	22	25	30	34	38	16%
- Mainframe	1	1	1	1	2	2	2	1	l .
- Minicomputer	5	1	5	6	1	B .	1		14%
- Workstation/PC	10	1	12	1	1	20	23	27	18%
Turnkey Systems	31	15%	36	41	48	57	67	76	16%
- Equipment	15		17	1		1	ł		
- Application Software	6		8	ł .	1	14	I .	l .	
- System Software	2	1	2	1		ì	1	1	
- Professional Services	8		10	1				N .	20%
2 2									

Information Services Market Forecast Spain, 1994-1999

		Growth						1000	CAGR
PRODUCT/SERVICE CATEGORIES	1993 (\$M)	93-94 (%)	1994 (\$M)	1995 (\$M)	1996 (\$M)	1997 (\$M)	1998 (\$M)	1999 (\$M)	94-99 (%)
CATEGORIEG		1 70 1	(Ψ11)	(V10)		2000 (CATA)	191117	(Ψ(0))	30000 V. J. J. J. S.
COUNTRY TOTAL	2125	7%	2275	2465	2695	2965	3280	3610	10%
Professional Services	610	5%	635	680	735	800	870	940	8%
- IS Consulting	88	12%	98	112	130	151	172	196	15%
- Education & Training	60	0%	60	60	63	67	70	74	4%
- Software Development	455	5%	475	505	540	575	615	660	7%
- Application Management	4	20%	4	5	7	8	11	13	26%
Systems Integration	143	16%	165	186	211	235	265	299	13%
- Equipment	38	13%	43	47	52	56	61	67	9%
- Application Software	26	16%	30	37	46	57	70	86	23%
- System Software	10	36%	13	15	16	18	19	21	10%
- Professional Services	67	14%	76	84	92	99	108	118	9%
- Other	3	12%	3	4	5	6	6	8	18%
Outsourcing	37	21%	45	53	62	74	89	107	19%
- Platform Operations	18	15%	21	24	26	29	33	37	12%
- Application Operations	16	22%	20	24	29	35	43	53	22%
- Desktop Services	3	50%	4	6	7	10	13	17	32%
Processing Services	230	5%	242	251	263	277	290	305	5%
- Transaction Processing	196	5%	206	214	225	236	248	261	5%
- Utility Processing	15	2%	15	15	1	16	16	17	2%
- Other Processing	20	5%	21	22	23	25	26	28	6%
Network Services	135	13%	153	179	209	247	290	329	17%
- Electronic Information Svcs	88	10%	97	108	121	136	153	165	11%
- Network Applications	34	21%	41	50		76	93	111	22%
- Network Management	14	10%	16	21.5	27.5	35	44	54	28%
Systems Software	335	3%	345	355	365	390	415	445	5%
- Mainframe	137		128				1	i .	-5%
- Minicomputer	119	1	125	1	1	•		168	6%
- Workstation/PC	81		91	103	116	134	154	177	14%
Applications Software	260	14%	295	335	390	450	520	605	16%
- Mainframe	22	i	21	20		1	1	1	1
- Minicomputer	74	I	79		1			1	
- Workstation/PC	165	1	190			1	4	B .	19%
Turnkey Systems	376	5%	395	426	457	499	547	587	8%
- Equipment	182	1	186			i.	1	1	1
- Application Software	77	1	84	1	1	1	1	1	1
- System Software	22	1	23	I	l .	l .	1	L .	
- Professional Services	95		102	1	1	1	1		11%

Information Services Market Forecast Sweden, 1994-1999

PRODUCT/SERVICE CATEGORIES	1993 (\$M)	Growth 93-94 (%)	1994 (\$M)	1995 (\$M)	1996 (\$M)	1997 (\$M)	1998 (\$M)	1999 (\$M)	CAGR 94-99 (%)
COUNTRY TOTAL	2700	5%	2840	3045	3320	3655	4005	4390	9%
Professional Services	1175	3%	1210	1285	1390	1525	1645	1750	8%
- IS Consulting	126	6%	133	145	161	180	199	216	10%
 Education & Training 	79	3%	82	87	94	102	111	117	7%
 Software Development 	960	3%	985	1035	1115	1210	1305	1380	7%
- Application Management	13	14%	15	17	20	25	29	34	18%
Systems Integration	73	5%	77	87	97	108	121	137	12%
- Equipment	19	3%	20	22	24	25	27	29	8%
- Application Software	14	17%	16	20	25	30	37	44	22%
- System Software	5	2%	6	6	7	7	8	8	8%
- Professional Services	33	2%	33	36	39	42	45	48	8%
- Other	2	20%	2	3	4	5	6	7	28%
Outsourcing	168	23%	206	250	302	365	447	554	22%
- Platform Operations	46	14%	52	60	69	78	90	105	15%
- Application Operations	96	25%	120	145	177	214	262	323	22%
- Desktop Services	26	30%	34	44	57	74	96	126	30%
Processing Services	342	0%	342	339	339	339	341	341	0%
- Transaction Processing	310	0%	308	305	304	302	302	301	0%
- Utility Processing	7	-1%	7	6		6	6	6	-2%
- Other Processing	26	5%	27	28	30	31	33	34	4%
Network Services	106	13%	119	138	161	188	217	250	16%
- Electronic Information Svcs	61	8%	66	74	82	92	101	110	11%
- Network Applications	37	21%	45	54	67	83	101	121	22%
- Network Management	7	17%	9	9.5	11.5	14	15.5	_ 18	16%
Svstems Software	275	1%	275	285	295	305	320	330	4%
- Mainframe	138	1	131	126	1	119		111	-3%
- Minicomputer	75		78	82	1	91	97	102	6%
- Workstation/PC	63	t .	69	77		95	107	119	12%
Applications Software	265	13%	300	335	380	430	485	550	13%
- Mainframe	22	1	21	21	1	1		18	-3%
- Minicomputer	71	1	77	84	1	99	1		9%
- Workstation/PC	175	1	200		1	310	360	415	16%
Turnkey Systems	294	6%	312	330	360	396	438	474	9%
- Equipment	138		141	144	149	157	167	173	4%
- Application Software	60		66	1	1	92	105	117	12%
- System Software	19		19			21		23	3%
- Professional Services	78	1	84		1	126	144	162	14%

Information Services Market Forecast Switzerland, 1994-1999

PRODUCT/SERVICE CATEGORIES	1993 (\$M)	Growth 93-94	1994 (\$M)	1995	1996	1997	1998	1999	CAGR 94-99
CATEGORIES	(D)(1)	(%)	(Φ (N))	(\$M)	(\$M)	(\$M)	(\$M)	(\$M)	(%)
COUNTRY TOTAL	2735	5%	2880	3095	3345	3670	4030	4425	9%
Professional Services	685	2%	700	735	770	835	905	995	7%
- IS Consulting	79	9%	87	97	108	123	141	162	13%
- Education & Training	115	0%	115	119	123	130	137	148	5%
- Software Development	485	1%	495	510	535	575	620	675	6%
- Application Management	4	20%	4	5	6	9	11	14	26%
Systems Integration	173	13%	194	212	234	256	277	295	9%
- Equipment	46	9%	51	54	58	61	64	65	5%
- Application Software	32	22%	40	47	54	65	76	86	17%
- System Software	14	10%	16	17	19	19	21	22	6%
- Professional Services	76	10%	83	90	97	105	112	115	7%
- Other	4	20%	4	5	6	6	7	8	13%
Outsourcing	61	21%	74	89	106	125	148	174	19%
- Platform Operations	15	15%	17	19	21	24	27	30	12%
- Application Operations	40	20%	48	58	69	79	94	108	18%
- Desktop Services	7	40%	10	13	17	22	28	36	29%
Processing Services	328	7%	349	371	396	421	450	479	7%
- Transaction Processing	284	6%	302	320	342	364	389	414	6%
- Utility Processing	12	0%	12	12	13	13	13	14	2%
- Other Processing	32	9%	35	38	41	44	48	52	8%
Network Services	173	10%	191	223	259	302	353	403	16%
- Electronic Information Svcs	126	9%	137	151	169	187	212	230	11%
- Network Applications	40	18%	47	61	79	101	126	155	27%
- Network Management	7	10%	8	9.5	11	12.5	14.5	16.5	16%
Systems Software	540	1%	545	555	580	605	635	670	4%
- Mainframe	256	-6%	241	230	223	216	209	202	-4%
- Minicomputer	166	4%	173	177	187	198	209	220	5%
- Workstation/PC	119	12%	133	148	169	191	220	248	13%
Applications Software	345	10%	380	425	475	525	590	660	12%
- Mainframe	45	l	43	42	41	39	38	36	-4%
- Minicomputer	97	l	108	115	126		1 .	166	9%
- Workstation/PC	200	1	230		305	350	405	460	15%
Turnkey Systems	425	7%	453	497	540	605	669	734	10%
- Equipment	230		241	256	274	299	324	346	7%
- Application Software	58		65	72	83	97	112	126	14%
- System Software	25	1	25	29	32			43	11%
- Professional Services	112	10%	123	137	151	173	194	216	12%

Information Services Market Forecast United Kingdom, 1994-1999

		Growth							CAGR
PRODUCT/SERVICE	1993	93-94	1994	1995	1996	1997	1998	1999	94-99
CATEGORIES	(\$M)	(%)	(\$M)	(\$M)	(\$M)	(\$M)	(\$M)	(\$M)	(%)
COUNTRY TOTAL	11700	9%	12700	13900	15100	16300	17800	19100	8%
Professional Services	2900	2%	2900	3000	3000	3100	3100	3100	1%
- IS Consulting	610	10%	670	740	810	890	980	1070	10%
- Education & Training	290	3%	300	300	300	310	320	330	2%
- Software Development	1900	-2%	1900	1800	1800	1700	1600	1500	-5%
- Application Management	52	29%	67	89	111	141	185	237	29%
Systems Integration	1150	13%	1290	1450	1610	1780	1970	2190	11%
Systems Integration	300	10%		360	380	420	460	480	8%
- Equipment		27%	330			473			24%
- Application Software	192 89	27% 8%	244	303	377		584 126	710	24% 7%
 System Software Professional Services 		11%	96	104	111	118		133	6%
	550		610	660	710	730	760	820	13%
- Other	22	13%	25	28	. 33	37	41	46	13%
Outsourcing	870	34%	1170	1440	1760	2090	2420	2780	19%
- Platform Operations	220	43%	320	390	440	480	500	530	11%
- Application Operations	550	31%	720	890	1110	1350	1600	1860	21%
- Desktop Services	96	31%	126	163	207	259	318	385	25%
Processing Services	780	8%	840	870	920	950	1010	1050	4%
- Transaction Processing	610	5%	640	640		670	680	700	2%
- Utility Processing	20	0%	20	20		20	20	20	0%
- Other Processing	160	14%	180	210	!	270	300	340	13%
Network Services	1290	16%	1490	1730	1980	2280	2600	2940	15%
	860	12%	960	1080	1200	1320	1450	1550	10%
- Electronic Information Svcs	320	26%	400	500	620	770	930	1140	23%
Network ApplicationsNetwork Management	110	20%	130	150		1	220	250	14%
Systems Software	1800		1800	1900			2100		4%
- Mainframe	780	l .	740	I			610	l .	•
- Minicomputer	540	1	590	l	1	i	740	780	6%
- Workstation/PC	440	17%	520	580	650	720	800	890	11%
Applications Software	1100	12%	1200	1300	1500	1700	1900	2100	11%
- Mainframe	100	1	90		1	1		70	-5%
- Minicomputer	300	1	330	1			1	470	7%
- Workstation/PC	700	1	800					1500	14%
Turnkey Systems	1910	5%	2010	2100	2230	2410	2570	2770	7%
- Equipment	960	B .	1010	I	1	ı	1		5
- Equipment - Application Software	310	1	340	l .		1		1	•
- System Software	163	1	170				1		1
- Professional Services	470	1	500	1	1	li .	1		
1 3.555.5.13. 55.77.555	1,70	"							

Information Services Market Forecast Central and Eastern Europe, 1994-1999

PRODUCT/SERVICE CATEGORIES	1993 (\$M)	Growth 93-94 (%)	1994 (\$M)	1995 (\$M)	1996 (\$M)	1997 (\$M)	1998 (\$M)	1999 (\$M)	CAGR 94-99 (%)
04120011120	2000 ()	**************************************			(0.11)				5000 S.O.O.
COUNTRY TOTAL	585	19%	695	820	965	1165	1435	1690	19%
Professional Services	62	15%	71	79	89	102	115	127	12%
- IS Consulting	2	0%	2	2	2	2	2	2	0%
- Education & Training .	36	14%	41	46	52	60	68	75	13%
- Software Development	24	17%	28	31	35	40	45	50	12%
- Application Management	0	0%	0	0	0	0	0	0	0%
Systems Integration	325	20%	390	455	530	640	800	920	19%
- Equipment	90	17%	105	115	130	150	180	205	14%
- Application Software	60	33%	80	105	135	180	245	325	32%
- System Software	25	20%	30	35	40	45	55	65	17%
- Professional Services	145	17%	170	190	215	250	300	295	12%
- Other	5	40%	7	9	12	16	22	29	33%
Outsourcing	14	43%	20	26	35	46	61	81	32%
- Platform Operations	7	29%	9	11	14	17	21	26	24%
- Application Operations	5	60%	8	11	16	22	30	40	38%
- Desktop Services	2	50%	3	4	6	8	10	15	38%
Processing Services	17	18%	20	24	29	36	45	58	24%
- Transaction Processing	9	11%	10	12	14	16	18	21	16%
- Utility Processing	5	20%	6	6	6	7	8	9	8%
- Other Processing	3	60%	4	6	9	13	19	28	47%
Network Services	5	40%	7	10	14	20	28	41	42%
- Electronic Information Svcs	1	0%	1	1	2	2	3	3	43%
- Network Applications	3	60%	4	6	9	13	20	30	49%
- Network Management	2	40%	3	3	4	5	6	8	23%
Systems Software	58	16%	67	78	93	111	134	162	19%
- Mainframe	15		15	15	15	15	16	16	1%
- Minicomputer	18	1	21	25		36	43	52	20%
- Workstation/PC	25	l .	31			60	75	94	25%
Applications Software	80	18%	94	112	130	152	177	207	17%
- Mainframe	10		10	11	11	11	11	11	2%
- Minicomputer	26	1	30	1	41	47	54	62	16%
- Workstation/PC	44	1	54	1	1	94	112	134	20%
Turnkey Systems	22	23%	27	36	45	58	73	92	28%
- Equipment	11	i	13	17	21	26	33	41	26%
- Application Software	4	1	5	7	9	12	15	19	31%
- System Software	1	l .	1	2	2	3	3	4	32%
- Professional Services	6		8	10	13	17	22	28	28%

(Blank)



Latin America

This chapter presents the information services market forecast for the Latin American region. A regional summary at the product/service category level is provided, and separate country (or country grouping) forecasts are included for:

- Argentina
- Brazil
- Venezuela
- · Other Latin America

Information Services Market Forecast Latin America, 1994-1999

PRODUCT/SERVICE CATEGORIES	1993 (\$M)	Growth 93-94 (%)	1994 (\$M)	1995 (\$M)	1996 (\$M)	1997 (\$M)	1998 (\$M)	1999 (\$M)	CAGR 94-99 (%)
REGIONAL TOTAL	3958	17%	4618	5405	6360	7487	8879	10598	18%
Professional Services	696	17%	813	951	1123	1319	1557	1860	18%
Systems Integration	141	11%	156	174	198	225	256	292	13%
Outsourcing	146	11%	162	180	201	225	255	290	12%
Processing Services	303	11%	335	374	418	467	536	627	13%
Network Services	143	12%	160	182	206	236	274	319	15%
Applications Software	1229	20%	1479	1785	2156	2607	3155	3838	21%
Turnkey Systems	508	16%	587	681	787	909	1060	1231	16%
Systems Software	792	17%	926	1078	1271	1499	1786	2141	18%

Information Services Market Forecast Argentina, 1994-1999

PRODUCT/SERVICE CATEGORIES	1993 (\$M)	Growth 93-94 (%)	1994 (\$M)	1995 (\$M)	1996 (\$M)	1997 (\$M)	1998 (\$M)	1999 (\$M)	CAGR 94-99 (%)
COUNTRY TOTAL	615	17%	720	844	990	1169	1385	1642	18%
Professional Services	117	18%	138	163	192	229	272	325	19%
- IS Consulting	30	20%	36	42	49	59	69	85	19%
 Education & Training 	16	13%	18	22	25	28	33	38	16%
- Software Development	71	18%	84	99	118	142	170	202	19%
Systems Integration	43	12%	48	55	64	74	83	96	15%
- Equipment	12	8%	13	14	16	19	21	24	13%
 Software Products 	17	12%	19	22	25	28	32	37	14%
 Professional Services 	13	15%	15	18	22	25	28	33	17%
- Other	1	0%	1	1	1	2	2	2	15%
Outsourcing	47	15%	54	62	72	84	98	116	17%
- Platform Operations	28	18%	33	37	43	49	57	69	16%
- Applications Operations	19	11%	21	25	29	35	41	47	17%
Processing Services	40	13%	45	50	56	63	72	83	13%
- Transaction Processing	18	17%	21	25	28	32	37	44	16%
- Utility Processing	13	8%	14	15	17	19	21	23	10%
- Other Processing	9	11%	10	10	11	12	14	16	10%
Network Services	20	10%	22	26	30	34	39	45	15%
- Electronic Information Svcs	17	12%	19	22	25	29	34	39	15%
- Network Applications	3	0%	3	4	5	5	5	6	15%
Applications Software	174	18%	206	243	287	340	405	487	19%
Turnkey Systems	74	19%	88	103	119	136	158	182	16%
- Equipment	38	18%	45	51	58	64	71	79	12%
- Software Products	22	23%	27	32	37	45	54	64	19%
- Professional Services	14	14%	16	20	24	27	33	39	20%
Systems Software	100	19%	119	142	170	209	258	308	21%
- Mainframe	62	21%	75	90	107	129	158	194	21%
- Minicomputer	7	14%	8	9	10	11	13	16	15%
- Workstation/PC	31	16%	36	43	53	69	87	98	22%

Information Services Market Forecast Brazil, 1994-1999

PRODUCT/SERVICE	1993	Growth 93-94	1994	1995	1996	1997	1998	1999	CAGR 94-99
CATEGORIES	(\$10)	(%)	(\$M)	(SIM)	(\$M)	(\$M)	(5M)	(\$M)	(%)
COUNTRY TOTAL	1868	15%	2146	2475	2871	3332	3900	4618	17%
Professional Services	358	15%	411	472	552	639	743	886	17%
- IS Consulting	103	17%	121	146	173	206	240	285	19%
- Education & Training	51	16%	59	67	77	87	101	121	15%
- Software Development	204	13%	231	259	302	346	402	480	16%
Systems Integration	72	8%	78	85	95	106	119	131	11%
- Equipment	27	7%	29	31	33	36	40	44	9%
- Software Products	6	0%	6	6	7	7	8	8	6%
- Professional Services	37	11%	41	46	53	61	68	76	13%
- Other	2	0%	2	2	2	2	3	3	8%
Outsourcing	92	9%	100	109	118	128	141	155	9%
- Platform Operations	51	8%	55	58	62	67	73	80	8%
- Applications Operations	41	10%	45	51	56	61	68	75	11%
Processing Services	81	6%	86	94	101	107	117	130	9%
- Transaction Processing	35	9%	38	43	48	52	57	63	11%
- Utility Processing	29	3%	30	32	33	34	36	39	5%
- Other Processing	17	6%	18	19	20	21	24	28	9%
Network Services	86	12%	96	107	119	135	156	182	14%
- Electronic Information Svcs	72	13%	81	90	100	114	132	154	14%
- Network Applications	14	7%	15	17	19	21	24	28	13%
Applications Software	552	20%	660	794	949	1140	1372	1660	20%
Turnkey Systems	205	13%	231	263	298	341	397	459	15%
- Equipment	82	7%	88	95	101	109	127	147	11%
- Software Products	70	17%	82	98	116			185	18%
- Professional Services	53	15%	61	70	81	93	109	127	16%
Systems Software	422	15%	484	551	639	736	I	1015	
- Mainframe	264	16%	305	344	1	465		625	15%
- Minicomputer	29	10%	32	36	t	43		60	13%
- Workstation/PC	129	14%	147	171	198	228	265	330	18%
	1								

Information Services Market Forecast Venezuela, 1994-1999

PRODUCT/SERVICE CATEGORIES	1993 (\$M)	Growth 93-94 (%)	1994 (\$M)	1995 (\$M)	1996 (\$M)	1997 (\$M)	1998 (\$M)	1999 (\$M)	CAGR 94-99 (%)
COUNTRY TOTAL	560	17%	655	769	906	1057	1254	1483	18%
Professional Services	122	18%	144	172	204	239	282	330	18%
Systems Integration	15	20%	18	21	25	29	35	43	19%
Outsourcing	7	14%	8	9	11	13	16	19	19%
Processing Services	95	16%	110	127	147	168	199	244	17%
Network Services	19	11%	21	23	27	32	38	44	16%
Applications Software	153	18%	180	214	255	303	365	435	19%
Turnkey Systems	71	17%	83	98	114	130	150	170	15%
Systems Software	78	17%	91	105	123	143	169	198	17%

Information Services Market Forecast Other Latin America, 1994-1999

PRODUCT/SERVICE CATEGORIES	1993 (\$M)	Growth 93-94 (%)	1994 (\$M)	1995 (\$M)	1996 (\$M)	1997 (\$M)	1998 (\$M)	1999 (\$M)	CAGR 94-99 (%)
COUNTRY TOTAL	915	20%	1097	1317	1593	1929	2340	2855	21%
Professional Services	99	21%	120	144	175	212	260	319	22%
Systems Integration	11	9%	12	13	14	16	19	22	13%
Processing Services	87	8%	94	103	114	129	148	170	13%
Network Services	18	17%	21	26	30	35	41	48	18%
Applications Software	350	24%	433	534	665	824	1013	1256	24%
Turnkey Systems	158	17%	185	217	256	302	355	420	18%
Systems Software	192	21%	232	280	339	411	504	620	22%



Middle East/Africa

This chapter presents the information services market forecast for the Middle East/Africa region. Separate country forecasts are not available for this region since there is limited information availability.

The forecast is based primarily upon data from Egypt, Israel, Saudi Arabia and South Africa, plus secondary information regarding regional economics, and IT and information services expenditures obtained from other resources used by INPUT in the preparation of the forecast for this area.

Information Services Market Forecast Middle East/Africa, 1994-1999

PRODUCT/SERVICE CATEGORIES	1993 (\$M)	Growth 93-94 (%)	1994 (\$M)	1995 (\$M)	1996 (\$M)	1997 (\$M)	1998 (\$M)	1999 (\$M)	CAGR 94-99 (%)
Regional Total	1475	17%	1726	2032	2447	2955	3608	4412	21%
Professional Services	420	22%	513	631	799	1012	1285	1630	26%
Systems Integration	36	8%	39	43	47	52	59	67	11%
Processing Services	372	11%	414	464	525	583	658	745	12%
Network Services	22	9%	24	27	31	35	39	44	13%
Applications Software	416	21%	504	614	765	958	1217	1540	25%
Turnkey Systems	124	10%	137	150	165	188	211	233	11%
Systems Software	85	12%	95	103	115	127	139	153	10%



North America

This chapter presents the information services market forecast for the North American region. A regional summary at the product/service category level is provided, and separate country forecasts are included for:

- · Canada
- Mexico
- · United States

In this year's Worldwide Forecast Compendium Mexico has been moved from the Latin American Region to the North American Region. INPUT feels that this adjustment more accurately reflects the interdependence of the Canadian, United States and Mexican economies as a result of the recent passage of the North American Free Trade Agreement (NAFTA).

Information Services Market Forecast North America, 1994-1999

PRODUCT/SERVICE CATEGORIES	1993 (\$M)	Growth 93-94 (%)	1994 (\$M)	1995 (\$M)	1996 (\$M)	1997 (\$M)	1998 (\$M)	1999 (\$M)	CAGR 94-99 (%)
REGIONAL TOTAL	143152	11%	159171	177452	198514	222942	251368	284396	12%
Professional Services	22235	11%	24636	27206	30062	33252	36835	40862	11%
Systems Integration	10838	12%	12114	13864	15933	18326	21076	24221	15%
Outsourcing	13362	14%	15245	17641	20430	23831	27904	32823	17%
Processing Services	22425	8%	24262	26231	28399	30805	33487	36449	8%
Network Services	12290	15%	14172	16545	19561	23090	27313	32328	18%
Applications Software	25286	14%	28846	33083	37960	43753	50529	58411	15%
Turnkey Systems	14025	9%	15242	16581	17937	19403	21016	22827	8%
Systems Software	22691	9%	24654	26301	28232	30482	33208	36475	8%

Information Services Market Forecast Canada, 1994-1999

		Growth						386800000000000000000000000000000000000	CAGR
PRODUCT/SERVICE	1993	93-94	1994	1995	1996	1997	1998	1999	94-99
CATEGORIES	(\$M)	(%)	(\$M)	(\$M)	(\$M)	(\$M)	(\$M)	(\$M)	(%)
		***************************************		000000.0000000.000000	5000000.50.000000.0000000	2000000 10120000 1000000		50000.540000	
COUNTRY TOTAL	5765	10%	6354	7071	7869	8772	9772	10959	12%
Brafa adamat Ormala a	4207	440/	4.47.4	4040	400=	2272			
Professional Services	1327	11%	1474	1646	1837	2053	2283	2545	12%
- IS Consulting	480	13%	541	611	690	780	870	975	13%
- Education & Training	238	12%	266	298	333	373	418	470	12%
- Software Development	609	10%	667	737	814	900	995	1100	11%
Systems Integration	835	9%	914	1005	1104	1215	1341	1510	11%
- Equipment	334	7%	358	388	420	456	495	537	8%
- Software Products	158	9%	172	186	202	220	243	268	9%
- Professional Services	303	13%	342	385	432	485	546	643	13%
- Other	40	5%	42	46	50	54	57	62	8%
Outsourcing	730	14%	830	980	1164	1376	1630	1933	18%
- Platform Operations	180	11%	200	224	252	282	316	355	12%
- Applications Operations	210	10%	230	267	311	362	420	489	16%
- Desktop Services	180	17%	210	256	312	380	463	561	22%
- Network Management	160	19%	190	233	289	352	431	528	23%
genen		, , , ,			200	002	101	020	20,0
Processing Services	733	7%	784	838	897	961	1031	1124	7%
- Transaction Processing	448	8%	483	522	564	609	658	725	8%
- Utility Processing	241	3%	~249	256	264	272	280	289	3%
- Other Processing	44	18%	52	60	69	80	93	110	16%
Network Services	285	17%	334	393	460	536	614	705	16%
- Electronic Information Svcs	103	16%	119	140	163	187	214	240	15%
- Network Applications	182	18%	215	253	297	349	400	465	17%
Systems Software	723	9%	786	854	917	979	1060	1110	8%
- Mainframe	328		347	360	368	376		1148 391	2%
- Minicomputer	235	7%	251	270	281	283		300	2 % 4%
- Workstation/PC	160		188	224	268	320		457	19%
- VVOIKStation/PC	160	10%	100	224	200	320	303	457	1970
Applications Software	796	11%	884	991	1109	1253	1396	1560	12%
- Mainframe	203	6%	215	227	238	248	257	265	4%
- Minicomputer	233	7%	250	266	281	295	307	313	5%
- Workstation/PC	360	16%	419	498	590	710	832	982	19%
Turnkey Systems	336	4%	348	364	381	399	417	434	5%
- Equipment	109	0%	109	113	117	121		127	3%
- Software Products	188	5%	197	206	216	226	1		5%
- Professional Services	39	8%	42	45	48	52	1		8%
		- 1-						_ `	
						<u>- :</u> -			

Information Services Market Forecast Mexico, 1994-1999

PRODUCT/SERVICE CATEGORIES	1993 (\$M)	Growth 93-94 (%)	1994 (\$M)	1995 (\$M)	1996 (\$M)	1997 (\$M)	1998 (\$M)	1999 (\$M)	CAGR 94-99 (%)
COUNTRY TOTAL	798	22%	973	1093	1223	1395	1617	1941	15%
Professional Services	130	25%	162	183	205	236	271	323	15%
- IS Consulting	55	24%	68	78	90	106	122	145	16%
- Education & Training	13	15%	15	16	16	17	19	22	8%
- Software Development	62	27%	79	89	99	113	130	156	15%
Systems Integration	14	14%	16	19	22	26	31	38	19%
- Equipment	5	0%	5	6	7	7	8	10	15%
- Software Products	1	100%	2	2	2	3	3	4	15%
- Professional Services	8	13%	9	11	13	16	20	24	22%
Outsourcing	97	14%	111	116	121	129	148	178	10%
- Platform Operations	59	15%	68	72	75	81	93	112	10%
- Applications Operations	38	13%	43	44	46	48	55	66	9%
Processing Services	63	13%	71	76	81	87	100	120	11%
- Transaction Processing	34	15%	39	41	45	49	55	68	12%
- Utility Processing	25	8%	27	30	30	32	38	44	10%
- Other Processing	4	25%	5	5	6	6	7	8	10%
Network Services	12	17%	14	15	15	16	20	26	13%
- Electronic Information Svcs	10	10%	11	12	12	13	15	19	12%
- Network Applications	2	50%	3	3	3	3	5	7	18%
Applications Software	237	30%	308	364	430	512	602	722	19%
Turnkey Systems	125	15%	144	157	169	184	211	253	12%
- Equipment	53	11%	59	62	63	66	76	91	9%
- Software Products	29	14%	33	36	39	42	48	58	12%
- Professional Services	43	21%	52	59	67	76	87	104	15%
Systems Software	120	23%	147	163	180	205	234	281	14%
- Mainframe	47	26%	59	65	72	81	93	112	1
- Minicomputer	22	14%	25	26	28	32	36	43	
- Workstation/PC	51	24%	63	72	80	92	105	126	15%

Information Services Market Forecast United States, 1994-1999

PRODUCT/SERVICE		Growth 93-94	1994	1995	1996	1997	1998	1999	CAGR 94-99
	1993								
CATEGORIES	(\$M)	(%)	(\$M)	(\$M)	(\$M)	(\$M)	(\$M)	(\$M)	(%)
COUNTRY TOTAL	136589	11%	151844	169288	189422	212775	239979	271496	12%
Professional Services	20778	11%	23000	25377	28020	30963	34281	37994	11%
- IS Consulting	5165	13%	5830	6566	7386	8313	9362	10548	13%
- Education & Training	3096	11%	3430	3783	4171	4603	5090	5640	10%
- Software Development	12517	10%	13740	15028	16463	18047	19829	21806	10%
Systems Integration	9989	12%	11184	12840	14807	17085	19704	22673	15%
- Equipment	4612	10%	5059	5764	6585	7559	8644	9868	14%
- Software Products	768	10%	848	983	1150	1330	1546	1750	16%
- Professional Services	4233	15%	4879	5628	6530	7574	8801	10269	16%
- Other	376	6%	398	465	542	622	713	786	15%
Outsourcing	12535	14%	14304	16545	19145	22326	26126	30712	17%
- Platform Operations	4047	11%	4485	5035	5632	6347	7139	8058	12%
- Applications Operations	5579	14%	6352	7312	8424	9739	11288	13170	16%
- Desktop Services	1468	17%	1716	2042	2444	2968	3637	4484	21%
- Network Management	1441	22%	1751	2156	2645	3272	4062	5000	23%
Processing Services	21629	8%	23407	25317	27421	29757	32356	35205	9%
- Transaction Processing	17264	7%	18397	19597	20921	22407	24036	25795	7%
- Utility Processing	1030	4%	1075	1120	1170	1220	1270	1320	4%
- Other Processing	3335	18%	3935	4600	5330	6130	7050	8090	16%
Network Services	11993	15%	13824	16137	19086	22538	26679	31597	18%
- Electronic Information Svcs	9593	16%	11094	12942	15265	17923	21083	24861	18%
- Network Applications	2400	14%	2730	3195	3821	4615	5596	6736	20%
Systems Software	21848	9%	23721	25284	27135	29298	31914	35046	8%
- Mainframe	9454	3%	9738	9870	10028	10214	10426	10666	2%
- Minicomputer	6930	5%	7309	7519	7741	7977	8228	8493	3%
- Workstation/PC	5464	22%	6674	7895	9366	11107	13260	15887	19%
Applications Software	24253	14%	27654	31728	36421	41988	48531	56129	15%
- Mainframe	5548	7%	5935	6330	6751	7191	7635	8191	7%
- Minicomputer	6335	9%	6904	7527	8172	8850	9561	10384	9%
- Workstation/PC	12370	20%	14815	17871	21498	25947	31335	37554	20%
Turnkey Systems	13564	9%	14750	16060	17387	18820	20388	22140	8%
- Equipment	5848	6%	6184	6553	6887	7245	7605	8000	5%
- Software Products	5148	10%	5658	6220	6814	7433	8107	8861	9%
- Professional Services	2568	13%	2908	3287	3686	4142	4676	5279	13%

(Blank)



